

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Luis M. Ortiz

EXAMINER: Elahee, MD S

SERIAL NO.: 09/887,492

GROUP: 2614

FILED: 06/22/2001

ATTY DKT NO.: Ortiz-1001

TITLE: SYSTEMS, METHODS AND APPARATUSES FOR BROKERING DATA
BETWEEN WIRELESS DEVICES AND DATA RENDERING DEVICES

Please forward all correspondence to:

ORTIZ & LOPEZ, PLLC
Patent Attorneys
P.O. Box 4484
Albuquerque, NM 87196-4484

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
deposited as first class mail addressed to
Mail Stop Appeal, Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450,

on June 13, 2008

Signature

Luis M. Ortiz

Mail Stop Appeal

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' APPEAL BRIEF UNDER C.F.R. §1.192

I. REAL PARTY IN INTEREST

Luis M. Ortiz is the inventor of and also the real party in interest in
the present invention. Mr. Ortiz is the "Appellant" entitled to bring
forward this appeal.

II. RELATED APPEALS AND INTERFERENCES

None.

06/17/2008 NGUYEN1 00000011 09887492

01 FC:2402

255.00 0P

III. STATUS OF CLAIMS

Claims 1-3, 7-11, 15-23, 30, 31, 88-94, 97-100, and 105-117 are pending in the application.

Claims 32 through 78 are withdrawn from consideration following a restriction requirement during early prosecution.

Claims 4-6, 12-14, 24-29, 79-87, 95, 96, and 101-104 are cancelled.

Claims 1-3, 7-11, 15-23, 30, 31, 88-94, 97-100, and 105-117 are the subject of this appeal. Of these appealed claims, claims 1, 15, 30, 100 and 106 are independent.

Claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100, 105-113 and 115-117 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864).

Dependent claims 10, 21 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Challener et al* (US 6,591,297).

Dependent claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Magro et al* (US 6,457,08).

Dependent claim 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Ronen* (US. Pub. No. 2002/0156708).

IV. STATUS OF AMENDMENTS

None. No amendments were filed subsequent to final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The Applicants' invention is related to what can commonly be referred to as the field of location-based wireless services and also to wireless handheld data communication device applications.

The Basic Concept. At the time of Appellant's patent application filing, handheld wireless device users were generally restricted to viewing data using very small, device-based viewers having limited GUI functionality. For traveling handheld device users, data rendering devices (e.g., printers and video displays) are unavailable, locations are unknown or they are inconveniently located. At the time of Appellant's invention, mobile device users have limited access to data rendering resource and network resources necessary to utilize data retrieved through public wireless communication networks. Wireless device users were generally required to wait until access to a network data via wired or fixed computing devices having dedicated rendering peripherals and systems (e.g., personal computer with printing and display capabilities) became available. Such a limitation also required that users already know where rendering peripherals are located. For the remote wireless device user such as business travelers in airports or driving on the road, convenience and time have become important considerations in choosing how to access and view. Oftentimes, wireless device users are forced by circumstance to defer data retrieval until compatible equipment can be located or accessed, or users must rely on limited or inconvenient rendering systems and methods (e.g., back to the use of very small displays located on their handheld wireless devices). Unfortunately, many wireless device users forego data rendering plans altogether while traveling for business or pleasure because of the limitations in the state of the art when Appellant filed the present patent application. The present invention was filed with the United States Patent and Trademark Office by Appellant to present an invention that can overcome the shortfall in the wireless communications field by presenting a new location-based service to handheld wireless mobile device users.

More specific aspects of the *claimed* invention are summarized with reference to specific portions of Appellant's specification as follows:

Handheld Wireless Devices. Handheld Wireless devices (WDs) in accordance with the teaching of the claimed invention include wireless data telecommunication-enabled mobile phones, personal data assistants (PDAs), and smart phones, such as Blackberry and Palm handheld devices which are described throughout Appellant's specification and drawings.

Data Rendering Devices. Data Rendering Devices (DRDs) in accordance with the claimed invention include video monitors, Internet Kiosks, multimedia projectors and ATM machines, which have not previously been assigned to a user's handheld wireless device (WD) and are physically located in a publicly location that is generally unknown to users but openly accessible to the public and to public use. DRDs in accordance with Appellant's invention are meant to be public, and because of this their location is often not already known by or considered by the handheld wireless device (WD) user when requesting the assistance of a network to find a DRD.

Publically Accessible DRDs. It is important given the solution presented by Appellant that DRDs are "*publically accessible*" to handheld wireless device users when needed. Publicly available DRDs in accordance with the claimed invention and as written in the Summary of the Invention are "distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate." One or many DRDs can be located with the assistants of a telecommunication network and equipment for wireless device users (e.g., a cellular network), and DRD location is ideally based on the handheld device user's own physical location and/or a user's profile. Something is "public" as defined by *Merriam-Webster's Dictionary of Law* (1996) when it is "accessible or visible to the public."

Locate and Provide WDs Directions To DRDs. DRDs are located for WD users. Directions to a DRD are also provided to a WD user through the user's WD based on the geographic location of the WD (and its user) or the WD user profile. Providing directions to the DRDs, which can include a map, assists

users to physically locate publically accessible DRDs whose locations were not previously known to the WD user. Pages 26 and 27 of the specification describe these aspects of the claimed invention when describing Figures 9 and 10, as follows:

When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92. The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.

Referring to Figure 10, a flow diagram of DRD location and data delivery is illustrated. At the WD the user wanting to render data at a DRD can request the network to find a DRDs location 101. A network server will assist the WD as provided in Figure 9. The WD will receive DRD location information provided by the network 102. After DRD location is determined, the WD can have data delivered to the DRD either: directly from the WD 103 after physically locating the DRD, or via a request for data delivery through the network 104.

Determining Operational Readiness of DRDs. Yet another important feature of the present invention not taught or suggested by the prior art is the ability to use a network resource to check on the "*operational readiness*" of data rendering devices prior to a handheld wireless device user being sent by network resource to a DRD's location. The description indicates that a "status monitoring means 27" as shown in Figure 2 enables this functionality. It can be appreciated that time would be wasted if a user is sent to a malfunctioning or occupied DRD. "Operational" means "Fit for proper

functioning; ready for use: *[as in] an operational aircraft...*”, according to The American Heritage® Dictionary of the English Language, Fourth (2006, Houghton Mifflin Company). Also according to the American Heritage dictionary, “readiness” means “[p]repared or available for service, action, or progress: *I am ready to work.*” At page Appellant’s detailed description where Figure 11 is described, the following is written with respect to operation readiness:

Although a DRD may seem appropriate for temporary assignment to the WD/user for data rendering because of its proximity to and/or profile match with the WD/user, it may not be available for rendering. For example, a DRD may not be available for rendering because it is out of service or has already reached its schedules/queued/potential capacity for data delivery/rendering based on a report by dedicated status monitoring means at the DRD.

Consistent with the above summary of the invention, and in accordance with the requirements of 37 CFR §41.37(c)(1)(x), direct association to specific locations in the specification drawings, of the claim language for claims 1, 15, 30, 100 and 106 and specifically distinguishing each independent claim from the art of record (including underlined portions for specific aspects that are not suggested by, or motivated by a combination of, the cited art), is shown by figure number and element identifier, and by page and line number, as indicated below:

CLAIM 1	Location within Specification/Drawings
A method of brokering data between handheld wireless devices and publicly available data rendering devices with locations and capabilities not previously known to the handheld wireless devices or their users, comprising:	FIGS. 4 to 12. ABSTRACT Pages 11-12 of Specification.
identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) located at a fixed, publicly accessible location not yet known to said WD or	FIG. 4; FIG. 6; FIG. 7. Page 11 of Specification: “DRDs can generally be considered “undedicated” rendering devices (e.g., “unassigned” as a resource and/or generally available and open to the acceptance and rendering of data from unfamiliar users). DRDs can be located generally

its user;	throughout an enterprise or private campus, or be distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate. ”
<u>providing a request from said WD through a wireless telecommunications network supporting voice and data communications by said WD to a remote network resource for said remote network resource to locate at least one DRD, said at least one DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said network resource further adapted to identify the location, rendering capabilities and operational status of at least one DRD in accordance with at least one of said WD’s geographic location and a WD user profile associated with said WD;</u>	<p>FIG. 7 to 9; FIG. 9; FIG. 10; FIG. 12.</p> <p>Page 11 of Specification: “In accordance with a feature of the present invention, DRDs can receive data directly from WDs and/or through networks after/with coordination by WDs with networks providing data to DRDs. ”</p> <p>“In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices.”</p> <p>“In accordance with another feature of the present invention, a WD can be used to locate a DRD based on a WD and/or WD user’s location and/or profile.”</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
<u>said network resource identifying the location, rendering capabilities and operational status of at least</u>	<p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification: “In accordance with another feature of the present invention, user/WD</p>

<p><u>one DRD based on at least one of said WD's location and said WD user profile;</u></p>	<p>location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.</p> <p>Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)."</p> <p>Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity)."</p> <p>Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92."</p>
<p><u>said network resource providing said WD with location information for at least one publicly accessible DRD;</u></p>	<p>FIG. 10.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and/or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6."</p>
<p>selecting a DRD with said WD;</p>	<p>FIG. 6; FIG. 7</p> <p>Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."</p>

<p><u>at least one of said WD, said wireless telecommunications network and said network resource providing navigable directions on said WD to physically locate a DRD selected with said WD based on the geographic location of said WD; and</u></p>	<p>FIG. 10.</p> <p>Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62."</p> <p>Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."</p>
<p>transferring said data at the request of said WD to said DRD from at least one of an email box or a memory associated with said WD, said data transferred to said DRD for rendering.</p>	<p>FIGS. 4 to 6; FIGS. 8 to 10.</p> <p>Page 25: "A WD user can render the data directly at the DRD if its location is known to the user, or the user can request networks in communication with the WD for assistance in locating an appropriate DRD. DRD location can be based on the user's location or proximity to DRDs (known or determinable by the network or WD) and/or can be based on user requirements provided to the network or embodied in a WD user profile."</p> <p>"Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63. Referring to Figure 7, the WD can first be used by the WD user to request network assistance in locating an appropriate DRD 71. After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."</p>

CLAIM 15	Location within Specification/Drawings
<p>A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), the DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, wherein the DRD is not assigned to the WD, the DRD's physical location is not known by the WD and its user, and the DRD is publicly accessible to all WD users, wherein a WD user performs the following steps at the WD:</p>	<p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD</p>

	<p>20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p>identifying data with the WD to render at a publicly accessible DRD;</p>	<p>FIG. 4.</p> <p>Page 24: "In accordance with aspects of using the present invention methods of use will now be described. Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD."</p>
<p><u>providing a DRD locator request with the WD to public communications network resources through a wireless cellular communications network supporting wireless voice and data communications by the WD, the DRD locator request being provided for said public communication network resources to find at least one publically accessible DRD located near the WD, the locator request further including WD geographic location information;</u></p>	<p>FIG. 9; FIG. 10; FIG 12.</p> <p>Page 19: "WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>receiving DRD location information and rendering capabilities at the WD for the at least one publicly accessible DRD located near the WD, wherein DRD location information is based on said WD geographic location information;</u></p>	<p>FIG. 10.</p> <p>Page 19: "WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information."</p>

222

	<p>“Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
selecting a DRD with the WD for rendering said data;	<p>FIG. 6; FIG. 7</p> <p>Page 19: “The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user.”</p>
<u>providing directions to the WD to physically locate the DRD selected by the WD, said directions provided to the WD from at least one of the WD and the network resource based on the WD geographic location information;</u>	<p>FIG. 10.</p> <p>Page 25: “If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62.”</p> <p>Page 26: “The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.”</p>
physically locating the DRD at the DRD’s publicly accessible location; and	<p>Page 25: “After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73.”</p>
requesting at the WD that the data be transferred to the DRD through at least one of said public wireless cellular communications network and a short range wireless communications link with the DRD.	<p>FIGS. 4 to 6; FIGS. 8 to 10.</p> <p>Page 25: “A WD user can render the data directly at the DRD if its location is known to the user, or the user can request networks in communication with the WD for assistance in locating an appropriate DRD. DRD location can be based on the user’s location or proximity to DRDs (known or determinable by the network or WD) and/or can be based on user requirements provided to the network or embodied in a WD user profile.”</p> <p>“Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63. Referring to Figure 7, the WD can first be used by the WD user to request network assistance in locating an appropriate DRD 71. After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73.”</p>

CLAIM 30	Location within Specification/Drawings
<p>A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:</p>	<p>FIGS. 4 to 12.</p> <p>ABSTRACT</p>
<p><u>using a wireless device (WD) to request support through a wireless cellular telecommunications network to a remote server adapted to maintain location and capability information for data rendering devices, to locate at least one publicly accessible data rendering device (DRD) and provide publicly accessible DRD capability information stored in the remote server, and wherein the at least one DRD is not previously assigned to the WD and its location not previously known to the WD or its user, and the at least one DRD is physically accessible to all WD users, wherein locating of at least one DRD is facilitated by said remote server in cooperation with the wireless cellular telecommunications network in accordance with at least one of a WD user profile and the geographic location of the WD;</u></p>	<p>FIGS. 10 to 12.</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and/or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
<p><u>receiving DRD location and capability information at the WD for at least one DRD located near the WD;</u></p>	<p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification:</p> <p>“In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.</p> <p>Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness).”</p>

	<p>Page 18: “A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity).”</p> <p>Page 26: “When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92.”</p>
selecting a DRD with said WD for rendering data;	<p>FIG. 6; FIG. 7</p> <p>Page 19: “The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user.”</p>
<u>the network resource verifying operational readiness of the DRD selected by the WD and providing directions on the WD for the user to follow to physically locate the DRD selected with the WD if the DRD selected by the user is deemed operational, the directions provided to the WD based on the geographic location of the WD;</u>	<p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification: “In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.</p> <p>Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness).”</p> <p>Page 18: “A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity).”</p> <p>Page 26: “When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location</p>

	based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92.”
selecting data with the WD for rendering at the DRD once the DRD has been physically located by the user; and	<p>Page 25: “After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73.”</p> <p>FIGS. 4 to 6; FIGS. 8 to 10.</p> <p>Page 25: “Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63.”</p>
<u>providing the data from at least one of a memory and email box associated with the WD, at the request of the WD, to the DRD for rendering.</u>	<p>FIG. 4.</p> <p>Page 24: “Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD.”</p> <p>Page 24: “Enhanced messaging applications have also been developed in response to the convergence of voice and data networks and improving wireless technology. Unified Messaging solutions allow carriers and Internet service providers to manage customer e-mail, voice messages and fax images and can facilitate delivery of these communications to PDAs, telephony devices, pagers, personal computers and other capable information retrieval devices, wired or wireless.”</p>

CLAIM 100	Location within Specification/Drawings
A method using a wireless cellular telecommunications network adapted for supporting wireless hand held device users in voice and data communications and with brokering data between handheld wireless devices and publicly accessible data rendering devices where physical locations for publicly accessible data rendering devices are not previously known to the	<p>FIG. 1; FIGS. 8-12.</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to</p>

<p>wireless hand held device users, steps of the method carried out by a hand held wireless device user comprising:</p>	<p>the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>providing a request over the wireless cellular telecommunication network from a handheld wireless device (WD) to a remote data network resource to locate at least one publicly accessible data rendering device (DRD) and identify operational readiness and rendering capabilities for the at least one publically accessible DRD matching user requested rendering capabilities also provided from the WD, said remote data network resource adapted to provide assistance to WD users to locate and assess publicly accessible DRDs by determining WD geographic location, locating at least one operational DRD located near the WD based on the WD geographic location and DRD rendering capabilities, and then identifying on the WD at least one DRD that is operational, matches user requested rendering capabilities and is geographically located near the WD;</u></p>	<p>FIG. 1; FIGS. 8-12.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>receiving location information for at least one publicly accessible DRD at the WD from the network resource through the wireless cellular telecommunications network</u></p>	<p>FIG. 1; FIGS. 8-12.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources</p>

<p><u>supporting wireless communication by the WD, said location information identifying at least one DRD geographically located near the WD that is operational and matches user rendering capabilities;</u></p>	<p>(e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p>selecting only one DRD from the at least one publicly accessible DRD using the WD;</p>	<p>FIG. 6; FIG. 7</p> <p>Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."</p>
<p><u>obtaining directions to the only one DRD using at least one of the WD, the wireless cellular telecommunications network, and GPS based on the geographic location of the WD;</u></p>	<p>FIG. 10.</p> <p>Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62."</p> <p>Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."</p>
<p>selecting data for rendering at the DRD using the WD after the only one DRD is physically located; and</p>	<p>Page 25: "After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."</p> <p>FIGS. 4 to 6; FIGS. 8 to 10.</p>

	<p>Page 25: “Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63.”</p>
<p>transferring data using the WD to the DRD for rendering.</p>	<p>FIG. 4.</p> <p>Page 24: “Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD.”</p>

CLAIM 106	Location within Specification/Drawings
<p>A location based service method using data communications network resources to assist a user of a GPS-enabled hand held wireless device supported by a wireless cellular telecommunications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, the publicly accessible DRD comprising at least one of a printer, video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:</p>	<p>Page 5: “Wireless Intelligent Networks (WIN) are generally known as the architecture of the wireless switched network that allows carriers to provide enhanced and customized services for mobile telephones.”</p> <p>Pages 6-7: “Wireless location based services now being deployed on wireless networks enable wireless service providers to utilize information regarding the geographic location of wireless devices/callers to provide public safety (e.g., E-911), location-sensitive billing, location-specific information (e.g., advertising) and tracking services.”</p> <p>Page 11: “In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices.”</p> <p>Page 17: “Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user=s location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12.”</p> <p>FIG. 4; FIG. 6; FIG. 7.</p> <p>Page 11 of Specification: “DRDs can generally be considered “undedicated” rendering devices (e.g., “unassigned” as a resource and/or generally available and</p>

	<p>open to the acceptance and rendering of data from unfamiliar users). DRDs can be located generally throughout an enterprise or private campus, or be distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate.”</p>
<p><u>receiving a user request provided over the wireless cellular telecommunications network from a user of the GPS-enabled hand held wireless device to a data communications network resource for assistance in locating a publicly accessible DRD based on geographic location information for the GPS-enabled wireless hand held device, rendering capabilities required by the user, and operational readiness of publicly accessible DRDs;</u></p>	<p>FIG. 7 to 9; FIG. 9; FIG. 10; FIG. 12.</p> <p>Page 11 of Specification:</p> <p>“In accordance with a feature of the present invention, DRDs can receive data directly from WDs and/or through networks after/with coordination by WDs with networks providing data to DRDs.”</p> <p>“In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices.”</p> <p>“In accordance with another feature of the present invention, a WD can be used to locate a DRD based on a WD and/or WD user’s location and/or profile.”</p> <p>Page 17: “Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user’s location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12.”</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers,</p>

	<p>photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
<p><u>the data communications network resource determining the geographic location of the GPS-enabled hand held wireless device;</u></p>	<p>Page 17: “Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user’s location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12.”</p> <p>Page 19: “In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information.”</p>
<p><u>the data communications network resource using the geographic location of the GPS-enabled hand held wireless device to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device that is operational and matches the rendering capabilities required by the user;</u></p>	<p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p> <p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification: “Another feature of the present invention allows the network to verify DRD</p>

	<p>availability (e.g., operational readiness).”</p> <p>Page 18: “A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity).”</p>
<p><u>the data communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device;</u></p>	<p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and/or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6.”</p>
<p>the user selecting only one publicly accessible DRD for rendering data; and</p>	<p>FIG. 6; FIG. 7</p> <p>Page 19: “The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user.”</p>
<p><u>the GPS-enabled hand held wireless device with the support of at least one of GPS and the wireless cellular telecommunications network providing the user directions to physically locate the only one publicly accessible DRD given the geographic location of the GPS-enabled hand held wireless device.</u></p>	<p>FIG. 10.</p> <p>Page 25: “If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62.”</p> <p>Page 26: “The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.”</p>

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL – ISSUES

Whether independent **claim 1** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 15** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 30** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 100** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 106** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

VII. ARGUMENT

A. GROUPING OF CLAIMS

Five (V) groups of claims are being appealed as follows:

GROUP I CLAIMS:

Group I consists of claims 1-3, 7-11 and 14. **Claim 1** is independent. Claims 2-3, 7-11 and 14 stand or fall with independent claim 1. Independent claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP II CLAIMS:

Group II consists of claim 15 to 22. **Claim 15** is independent. Claims 16 to 22 stand or fall with independent claim 15. Independent claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP III CLAIMS:

Group III consists of claims 30, 31, 88 to 94 and 97 to 99. **Claim 30** is independent. Claims 31, 88 to 94 and 97 to 99 stand or fall with independent claim 30. Independent claim 30 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP IV CLAIMS:

Group IV consists of claims 100 and 105. **Claim 100** is independent. Claim 105 stands or falls with independent claim 100. Independent claim 100 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP V CLAIMS:

Group V consists of claims 106 to 117. **Claim 106** is independent. Claims 107 to 117 stand or fall with independent claim 106. Independent claim

106 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

B. APPLICABLE LEGAL STANDARD

The relevant statute cited in rejecting Appellants' claims is 35 U.S.C. §103(a). The obligation of the Examiner to go forward and produce reasoning and evidence in support of obviousness under 35 U.S.C. §103 is clearly defined at M.P.E.P. §2142:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

M.P.E.P. §2143 sets out the three basic criteria that a patent examiner must satisfy to establish a *prima facie* case of obviousness necessary for establishing a rejection to a claim under 35 U.S.C. §103:

1. some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
2. a reasonable expectation of success; and
3. the teaching or suggestion of all the claim limitations by the prior art reference (or references when combined).

In the absence of such a *prima facie* showing of obviousness under 35 U.S.C. §103 by the examiner (assuming there are no objections or other grounds for rejection), an Applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443 (Fed. Cir. 1992).

Thus, in order to support an obviousness rejection under 35 U.S.C. §103, the Examiner is obliged to produce evidence compelling a conclusion that each of the aforementioned criteria has been met. If the Examiner fails to produce such a conclusion for each of the aforementioned criteria, the rejection must be withdrawn.

To overcome the unpatentable rejection, the Appellant need only demonstrate that not all elements of a *prima facie* case of obviousness have been met, *i. e.*, show that *Theimer et al* in view of *Hanada* fails teach or suggest every element in each of the Appellants' independent claims associated with the relevant reference used for their rejection.

C. UPTATENTABILITY UNDER 35 U.S.C. 103(a) IS NOT ESTABLISHED USING *THEIMER ET AL* IN VIEW OF *HANADA*.

Theimer et al is the predominant reference used as a basis to reject Appellant's independent claims 1, 15, 30, 100 and 106. It is combined with *Hanada* to incorporate *Hanada's* teaching of a printer as a rendering device capable of notifying by short range communication to an information providing apparatus such as a computer about the amount of time that it will take for data to be printed. Examiner believes that a teaching of rendering time is also a teaching of "operational readiness" for a remote data rendering device. This is simply not so.

i. Regarding "Operational Readiness."

Hanada is combined with *Theimer et al* to teach "operational readiness" as claimed by Appellant. Operational readiness is found in claims 1, 30, 100 and 106. *Hanada* primarily describes the printing of images from a still camera connected wirelessly via infrared with a printer. Perhaps *Hanada* is most unique in its ability to notify the data providing device about how much time it will take to print data at the printer. Indeed, many other references could have also been used in combination with *Theimer et al* for equipment capable of rendering data and notifying a computer about how long a print job might take or if a print job has failed. Appellant does not contest the existence of such capabilities in printers, like that taught by *Hanada* or networked printers that are widely available. It is important to note, however, that *Hanada* does not

notify information providers of any other condition other than expected print time for current print jobs. It is also important to note that this time-based "status" provided by *Hanada* is provided after the information provider already engaged with the printer or data has already been presented, which implies that the user is already engaged with and intends to utilize only one particular printer. It is also noteworthy that a WD is never presented with other rendering options, which implies user dedication to a single printing source. Therefore, *Hanada* is limited in the type of information provided, by when it is provided and how it is provided (e.g., via short range infrared communications after data is presented).

Fig 1, item 2; column 2, lines 48-52, lines 66-67, and column 3, lines 1-5 in *Hanada* are cited in support of a printer as a data rendering device. That the *Hanada* printer is a data rendering device is not disputed. Fig 1, item 2; column 2, lines 48-52, lines 66-67, and column 3, lines 1-5, 13-20, 34-43 and 56-63 in *Hanada* are cited in support of teaching the identification of operational status; yet all that is taught by these section of *Hanada* is the concept of determining current document print completion time and a enabling time status calculation, which are status that is provided after, not before, a user has already decided to use the one printer. The short range communication taught in *Hanada* also implied that the user is in close proximity (in front of) the printer, which would be necessary for infrared communications. The sections of *Hanada* cited by Examiner for support of operational readiness are provided below:

~~fyng the information apparatus of it.~~ The information apparatus transmits the print data to the printer when the first period of time is elapsed. Thus, the information apparatus needs not be kept in a status of reception or transmit data for inquiry so as to inquire about a status of the printer. 5
Consequently, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

Preferably, the step of calculating the first period of time includes a step of calculating a period of time it takes before 10
image formation for print data which is currently in the process of image formation is completed.

The printer calculates a period of time it takes before the currently processed image formation is completed for notifying the information apparatus of it. When the period of time is elapsed, the information apparatus transmits print data to the printer. Thus, even when a plurality of information apparatuses inquire about the status of the printer, each of the information apparatuses needs not be kept in the status of reception or transmit data for inquiry. Accordingly, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

. . . .

The printer calculates a period of time it takes before all of the currently processed image formation and that in a stand-by status are completed for notifying the information apparatus of it. The information apparatus transmits print data to the printer when the period of time is elapsed. Thus, even when three or more information apparatuses inquire about the status of the printer, each information apparatus needs not be kept in the status of reception or transmit data for inquiry. Therefore, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

. . . .

The printer calculates the first period of time it takes before it becomes ready to receive print data for notifying the information apparatus of it. The information apparatus transmits print data to the printer when the first period of time is elapsed. Thus, the information apparatus needs not be kept in the status of reception for inquiring about the status of the printer or transmit data for inquiry. ~~Accordingly, the~~

Clearly, *Hanada* is only concerned about how much "processing time" a print job will take. This type of status is not all that must be considered in Appellant's definition of "operational status". Appellant's teaching of operational readiness is to determine if a DRD is fit for proper functioning, ready for use, or otherwise prepared or available for service, action, or progress. Processing time is irrelevant if the DRD is not ready or available for service. In describing Figure 11, Appellant's detailed description states the following with respect to operation readiness:

Although a DRD may seem appropriate for temporary assignment to the WD/user for data rendering because of its proximity to and/or profile match with the WD/user, it may not be available for rendering. For example, a DRD may not be available for rendering because it is out of service or has already reached its schedules/queued/potential capacity for data delivery/rendering based on a report by dedicated status monitoring means at the DRD.

By not teaching operational readiness as taught by Appellant in Independent claims 1, 30, 100 and 106, the combination of the teachings of *Theimer et al* with a reference like *Hanada* fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3, and also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* fails to teach or suggest an invention that will remotely determine the "operational readiness" of a data rendering devices on behalf of wireless devices, as taught by Appellant and claimed in independent claims 1, 30, 100 and 106. But this is just one point of failure by *Theimer et al* in view of *Hanada*; the balance of Examiner's rejection will focus on specific teachings by *Theimer et al*.

What is apparently now most important in the analysis of whether *Theimer et al* in combination with *Hanada* would render Appellant's independent claims unpatentable is to focus on the specific teaching of *Theimer et al*. *Theimer et al* will likely be the core reference for analysis by the Board and, therefore, the rest of Appellant's argument remains focused on *Theimer et al*. Examiner apparently is of the same opinion having heavily emphasized aspects this reference throughout the prosecution history.

Appellant can show that the combination of the teachings of *Theimer et al* with *Hanada* fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3, and also fails to provide "some suggestion or motivation, either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143.

ii. Regarding "Public Accessibility."

Examiner specific references Figures 1 and 2 in *Theimer et al* in rejecting Appellant's independent claims 1, 15, 30, 100 and 106 stating that "Theimer teaches a method of brokering data between handheld wireless devices and data rendering devices with locations and capabilities not previously known to the hand held wireless devices or their users..." Figures 2 and 1 are copied below for the Board's convenience.

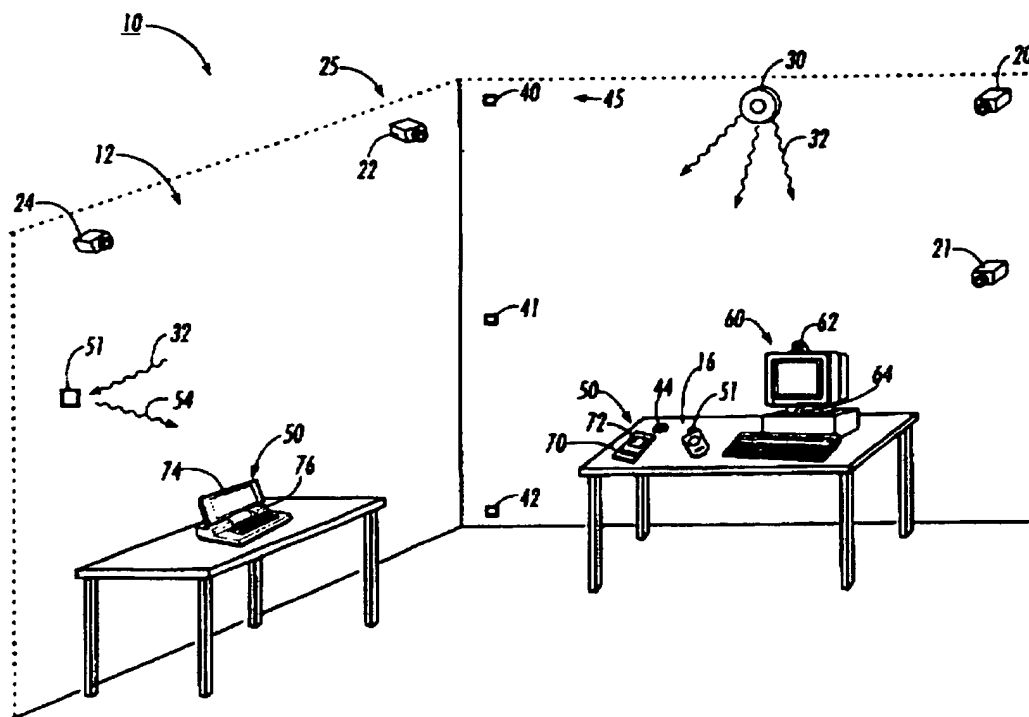
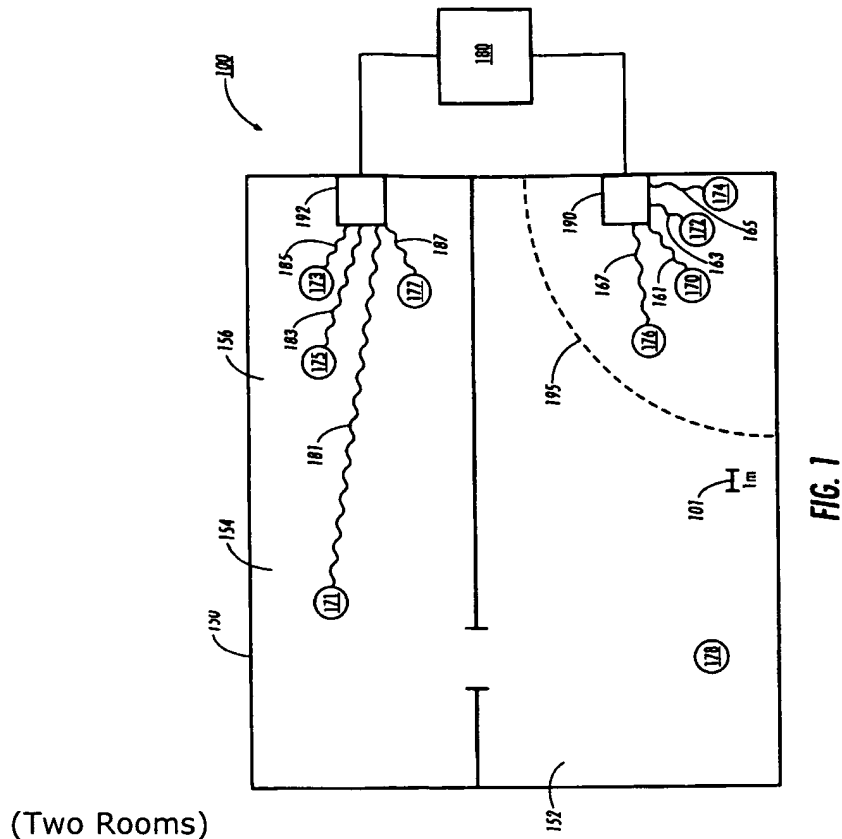


FIG. 2 (One Room)



In describing Figure 1, *Theimer et al* is primarily concerned with communication (data transfer) between electronic devices located in two rooms of a building. Figure 2 clearly shows a single room deployment for the *Theimer et al* spatial location and selective data transfer concept used between electronic devices in close proximity to each other. The detailed description for Figure 1 states:

In FIG. 1, the spatial localizing modules 190 and 192 track a plurality of electronic devices, indicated as circles 170–178. The electronic devices are distributed throughout two rooms 152 and 154 of a building 150, with a spatial localizing module respectively located in each room. A scale marker 101 representing a distance of one meter is shown for scale. The electronic devices 170–178 in the building 150 may be, for example, personal digital assistants, two-way pagers, laptop or notebook computers, computer tablets, or any other electronic device capable of wireless communication through radio, infrared, acoustic or other transmission links. In FIG. 1, communication links for data transmission are generically illustrated by wavy lines 161, 163, 165, 167, and 181, 183, 185, and 187.

Examiner cites to the Abstract, column 4, lines 42-47, 52-66, and column 5, lines 14-19, for the concept of data rendering devices being located at fixed, publicly accessible locations not yet known to a PDA or its user. The abstract and Figures 1 and 2 clearly teach that devices are located in close proximity to each other, and sometime in the very same room. The *Theimer et al* Abstract states:

A system for transferring digital information to spatially localizable portable electronic devices has a plurality of portable electronic devices, with each portable electronic device supporting wireless communication. A spatial module determine spatial location with submeter precision for each of the plurality of electronic devices, and communication module is connected to the spatial localizing module for mediating wireless communication between portable electronic devices. A user can define electronic data transfers between portable electronic devices in **user determined** spatial locations with submeter precision. Data transfers are possible to adjacent electronic devices, electronic devices within a defined radius, electronic devices along a defined bearing or having specific orientation, or even located within a defined set of regions or rooms.

[Emphasis added.]

It is clearly described by *Theimer et al* that the preferred embodiment therein is to use CCD cameras to determine the physical location of an electronic device is a defined space (e.g., a single or neighboring room) given the close spatial proximity of the electronic devices shown and described therein. The main thrust of *Theimer et al* is clearly to enable the short range (or defined range and controlled) transfer of data to select devices that are located near each other in the proximity of other electronic devices that should not receive the transfer. Spatial location control as taught by *Theimer et al* enables users to control what particular portable devices will receive a transfer from another portable device. The primary operational examples provided in *Theimer et al* is in the “adjacent transfer” of data from one portable device,

such as a PDA, to one or a select group of devices, such as other PDAs, in close proximity to the transferring device.

Appellant has previously shown Examiner that *Theimer et al* is interested in submeter applications and specifically states this at Column 2, lines 8-13:

“a range of spatial locations and orientations can be specified with transmission to adjacent electronic devices, to all electronic devices in a room, to all electronic devices in a particular orientation or direction, or even to all electronic devices at spatial locations within a specified range (e.g., within two meters).”

Theimer et al goes further by states that a user of the electronic devices (e.g., located within the same room) can “define electronic data transfers between portable electronic devices in user determined spatial locations with submeter precision.”

Theimer clearly shows that its features are most evidently advantageous when used in submeter applications and shows specific examples within the same physical space (i.e., a room) where IR transmitters and CCD cameras enable highly precise spatial location of tagged electronic devices.

Column 4, lines 42-47, 52-66 and column 5, lines 14-19 of *Theimer et al* cited by Examiner were again consulted by Appellant in preparation of this Appeal Brief, but these sections of the *Theimer et al* detailed disclosure do not reveal the aspect of fixed, publicly accessible data rendering devices not yet know to wireless devices selected for rendering data selected from a portable device (PDA). What is clear from these cited portions of *Theimer et al*, however, is that the transfer of data from one portable device to another within submeter range is its predominant feature. In fact enabling communications at as small as centimeter or millimeter distances between electronic devices is further discussed at column 4, lines 42-50, which provides:

In operation, the system 100 is capable of determining both relative and absolute spatial location of other electronic devices with submeter precision, and mediate transmission or reception of data only to specified electronic devices 170-178 based on the relative or absolute spatial location of those electronic devices. In certain preferred embodiments discussed later in connection with FIG. 2, centimeter or even millimeter scale spatial localization is possible, however, for many applications submeter precision is adequate. ~~Data~~

The combination of *Theimer et al* with *Hanada* clearly fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3. *Theimer et al* in view of *Hanada* does not teach or suggest fixed, publicly accessible data rendering devices not yet known to a wireless device that are operational and can be selected using communications network support based on wireless device location for rendering data selected from a wireless device, and with directions provided to the wireless devices so that the data rendering devices can be physically located. This is what is being claimed by Appellant and claimed in independent claims 1, 15, 30, 100 and 106.

Theimer et al in view of *Hanada* also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* does not provide some suggestion or motivation that fixed, publicly accessible data rendering devices that are verifiably operational and not yet known to wireless devices that can be presented to wireless devices to select for rendering data selected from a wireless device, and that directions to physically find a selected data rendering device can be provided to the wireless devices, as taught by Appellant and claimed in independent claims 1, 15, 30, 100 and 106. The location of electronic devices taught in *Theimer et al* and *Hanada* are already generally known. Locating unknown, publicly accessible rendering device on behalf of a wireless device using communications network resources is not taught or suggestion in *Theimer et al* and *Hanada*. The provision of navigable directions to wireless devices in order to physically locate data rendering device is never discussed by *Theimer et al* and *Hanada*.

iii. Regarding "Locating DRDs."

Examiner states that *Theimer et al* teaches "providing a request from a WD through a telecommunications network supporting voice and data communications by the WD to remote network resources for the remote network resource to locate at least one DRD, the network resource further adapted to identify the location, rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD." Column 1, lines 57-65, column 4, lines 42-62, and the public availability of GPS for navigation by civilians since the year 1980 is cited by Examiner as support for this argument. The cited sections were consulted, but do not reveal what is suggested by Examiner. *Theimer et al* does not teach providing a request from a wireless device through a telecommunications network supporting voice and data communication by the wireless device to a remote network resource for the remote network resource to identify the location and rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD.

Appellant does not dispute that GPS has been available for some time. In fact patents related to GPS were directly cited in the Background of Appellant's patent application. *Theimer et al* only mentions the use of differential GPS for possible refinement of spatial localizing modules as needed for further teaching of the spatial location and precise data transfer concept described with respect to Figure 1 in the *Theimer et al* specification:

~~hardware.~~ **Multiple spatial localizing modules connected to network 180 can be used, and a wide variety of mechanisms for determining spatial location can be employed, including image based techniques, ultrasound or other acoustic techniques, or even radio based techniques such as differential GPS.**

25

Theimer et al, however, would only teach and motivate one skilled in the art to utilize spatial GPS to determine the precise spatial location of electronic devices

located within about two meters of each other in the same environment (e.g., like the room of Figure 2) to enable the controlled transfer of data from one particular device to another (e.g., adjacent device) with submeter precision. *Theimer et al* in view of *Hanada* does not suggest the use of GPS for more than facilitating submeter precision for data transfer between closely proximate devices. Recall that *Hanada* also teaches proximate, infrared data communication between a printer and a information device (e.g., handheld wireless device); therefore, the combination of *Theimer et al* with *Hanada* still fails to teach the ability to provide a request from a wireless device through a telecommunications network supporting voice and data communication by the wireless device to a remote network resource for the remote network resource to identify the location and rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD.

Understanding the objective in *Theimer et al* is to enable accurate submeter data transfer between devices is important because it becomes clear how *Theimer et al* substantially differentiates and departs from Appellant's claimed invention. Appellant's claimed invention provides for a much broader (distant) use of GPS where DRDs unknown, public places are first located by a network resource on behalf of a wireless device based on the wireless devices GPS location and/or user profile before a DRD can be selected and then physically located using navigable directions to obtain data transferred to the DRD for rendering. Directions are not taught, suggested, or required in *Theimer et al*. In fact, the *Theimer et al* teaching would only be useful if used in Appellant's invention after a data rendering device has already been found based on the wireless device's geographic location, selected using the wireless device and physically located by using navigable directions on the wireless devices. None of this is taught by *Theimer et al* in view of *Hanada*. *Theimer et al* in view of *Hanada* simply does teach or suggest the use of communications network resources to assist a wireless device in locating an operational data rendering device that is publicly accessible and located near the wireless device,

and then provide navigable direction to the wireless device so that the data rendering device can be physically located.

Therefore, *Theimer et al* in view of *Hanada* again fails in “teaching or suggestion of all the claim limitations by the prior art reference” under M.P.E.P. §2143 criteria 3. *Theimer et al* in view of *Hanada* does not teach or suggest locating DRDs in unknown, public places by a network resource on behalf of a wireless device based on the wireless devices GPS location and/or user profile before a DRD is selected and then physically located for data to be transferred to the DRD for rendering. *Theimer et al* in view of *Hanada* also fails to provide “some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings” as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* fails to provide some suggestion or motivation that GPS and/or a user profile can be used to locate DRDs in unknown, public places on behalf of a wireless using a network resource device based on the wireless devices GPS location and/or user profile before a DRD is selected by the WD and then enabling the WD to physically locate with the DRD using navigable directions.

iv. Regarding “Providing WD Directions to Located DRDs.”

Examiner states that *Theimer et al* teaches providing a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device. Examiner once again cites column 1, lines 57-65, and column 4, lines 25-27 and 42-62 for support of these important aspects of Appellant’s claimed invention. These sections were consulted in preparation of this argument, yet support for providing DRD location information to a wireless device and then providing navigable direction on the wireless device to physically locate a DRD selected with the wireless device based on the geographic location of the

wireless device was not found in *Theimer et al.* *Theimer et al* does not teach or suggest providing directions from a first device to another using the geographic location of the first device. This is clearly because the physical location of devices taught in *Theimer et al* is already known and it is merely the spatial location at submeter accuracy for each device therein that is of primary interest in *Theimer et al.* Nowhere in the combined specifications of in view of *Theimer et al* in view of *Hanada* is it taught or suggested that direction for physically locating a DRD can be provided by a network resource to a wireless device.

Once again, *Theimer et al* in view of *Hanada* again fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3 and fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* in view of *Hanada* does not teach or suggest providing a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device. *Theimer et al* combined with *Hanada* also fails to provide some suggestion or motivation to provide a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device.

D. SUMMARY OF ARGUMENTS AND CONCLUSION

The following Claims Appendix (VIII) provides a listing of the appealed claims.

In summary, Applicant's claimed invention satisfies a long felt but unfulfilled need for roaming wireless device users such as business travelers to be able to find the unknown location of publicly available data rendering devices so that the roaming wireless device user can view or print electronic documents that are not easily viewable over their wireless handheld devices. *Theimer et al* in view of *Hanada* does not address or fulfill this need, nor does the combination of these references suggest Appellant's solution as claimed.

Theimer et al in view of *Hanada* does not suggest the use of wireless telecommunications networks to locate publicly accessible data rendering devices based on wireless device location, determine the operational readiness of data rendering devices, suggest data rendering devices located near the wireless device location for selection and then provide the wireless device with directions over the wireless device to physically find the data rendering device. Examiner has not met the requirements of MPEP to reject Appellant's claims 1, 15, 30, 100 and 106 as unpatentable under 35 U.S.C. 103(a) over *Theimer et al* in view of *Hanada*. Therefore, Appellant respectfully requests that the Board reverse Examiner and direct that Appellant's application be processed for prompt issuance.

Appellants respectfully submit that their arguments as well as the specification and prosecution record support that claims 1, 15, 30, 100 and 106 are independently allowable. Furthermore, Appellants submit that claims 2-3, 7-11, 14, 16-23, 31, 88-94, 97-99, 105, and 107-117 are allowable given their dependence upon their respective independent claims that have been shown to be allowable.

Appellant has proven that independent claims 1, 15, 39, 100 and 106, of the currently appealed application, are not unpatenatable over *Theimer et al* in view of *Hanada*. Appellant now respectfully requests that the Board reverse the rejections of claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100,

105-113 and 115-117 and instruct the Examiner to process claims 1-3, 7-11, 14-23, 30, 31, 88-94, 97-100, and 105-117 for early issuance.

Respectfully submitted,



Luis M. Ortiz
Attorney and Appellant
Attorney Registration No. 36,230
Telephone: (505) 314-1311
E-mail: lortiz@olpatentlaw.com

DATE: *June 13, 2008*

VIII. CLAIMS APPENDIX

1. A method of brokering data between handheld wireless devices and publicly available data rendering devices with locations and capabilities not previously known to the handheld wireless devices or their users, comprising:

identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) located at a fixed, publicly accessible location not yet known to said WD or its user;

providing a request from said WD through a wireless telecommunications network supporting voice and data communications by said WD to a remote network resource for said remote network resource to locate at least one DRD, said at least one DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said network resource further adapted to identify the location, rendering capabilities and operational status of at least one DRD in accordance with at least one of said WD's geographic location and a WD user profile associated with said WD;

said network resource identifying the location, rendering capabilities and operational status of at least one DRD based on at least one of said WD's location and said WD user profile;

said network resource providing said WD with location information for at least one publicly accessible DRD;

selecting a DRD with said WD;

at least one of said WD, said wireless telecommunications network and said network resource providing navigable directions on said WD to physically locate a DRD selected with said WD based on the geographic location of said WD; and

transferring said data at the request of said WD to said DRD from at least one of an email box or a memory associated with said WD, said data transferred to said DRD for rendering.

2. The method of claim 1 including a step wherein said DRD renders the data only after a render command is provided to said DRD through said WD.

3. The method of claim 2 wherein said render command includes a passcode.

7. The method of claim 1 wherein the data is rendered by said DRD after said render command is provided by a WD user on a user interface associated with said DRD.

8. The method of claim 1 wherein the data is retrieved from a memory assigned to the WD user only after the WD user provides a passcode to said DRD.

9. The method of claim 8 wherein said passcode is provided to said DRD by the WD.

10. The method of claim 8 wherein said passcode is provided at a user interface associated with said DRD.

11. The method of claim 8 wherein said command includes decryption coding.

14. The method of claim 1 including a step wherein said network resource provides the WD with a passcode for use on an interface integrated with said DRD to cause said DRD to render the data.

15. A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), the DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, wherein the DRD is not assigned to the WD, the DRD's physical location is not known by the WD and its user, and the DRD is

publicly accessible to all WD users, wherein a WD user performs the following steps at the WD:

- identifying data with the WD to render at a publicly accessible DRD;
- providing a DRD locator request with the WD to public communications network resources through a wireless cellular communications network supporting wireless voice and data communications by the WD, the DRD locator request being provided for said public communication network resources to find at least one publically accessible DRD located near the WD, the locator request further including WD geographic location information;
- receiving DRD location information and rendering capabilities at the WD for the at least one publicly accessible DRD located near the WD, wherein DRD location information is based on said WD geographic location information;
- selecting a DRD with the WD for rendering said data;
- providing directions to the WD to physically locate the DRD selected by the WD, said directions provided to the WD from at least one of the WD and the network resource based on the WD geographic location information;
- physically locating the DRD at the DRD's publicly accessible location; and
- requesting at the WD that the data be transferred to the DRD through at least one of said public wireless cellular communications network and a short range wireless communications link with the DRD.

16. The method of claim 15 wherein said data is transferred to said DRD from said public wireless communications network resources following the request at said WD.

17. The method of claim 16 wherein said public wireless communications network resources facilitates transfer of said data to said DRD from a memory associated with said WD.

18. The method of claim 17 wherein said step of requesting that said data be transferred to said DRD is followed by a step that includes entering a passcode by the WD user at said DRD to render the data.

19. The method of claim 16 wherein said data is retrieved from a mailbox assigned to said WD only after a passcode is provided to said DRD by said WD user.

20. The method of claim 19 wherein said passcode is provided to said DRD by said WD.

21. The method of claim 19 wherein said passcode is provided at a user interface associated with said DRD.

22. The method of claim 15 wherein said DRD renders data after a render command is provided to said DRD by said WD user.

23. The method of claim 22 wherein said render command includes a passcode.

30. A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:

using a wireless device (WD) to request support through a wireless cellular telecommunications network to a remote server adapted to maintain location and capability information for data rendering devices, to locate at least one publicly accessible data rendering device (DRD) and provide publicly accessible DRD capability information stored in the remote server, and wherein the at least one DRD is not previously assigned to the WD and its location not previously known to the WD or its user, and the at least one DRD is physically accessible to all WD users, wherein locating of at least one DRD is facilitated by said remote server in cooperation with the wireless cellular telecommunications network in accordance with at least one of a WD user profile and the geographic location of the WD;

receiving DRD location and capability information at the WD for the at least one DRD located near the WD;

selecting a DRD with said WD for rendering data;

the network resource verifying operational readiness of the DRD selected by the WD and providing directions on the WD for the user to follow to physically locate the DRD selected with the WD if the DRD selected by the user is deemed operational, the directions provided to the WD based on the geographic location of the WD;

selecting data with the WD for rendering at the DRD once the DRD has been physically located by the user; and

providing the data from at least one of a memory and email box associated with the WD, at the request of the WD, to the DRD for rendering.

31. (Previously amended) The invention of claim 30, wherein said DRD renders said data after a render command is provided at said DRD by the user associated with said WD.

88. The method of claim 31 wherein said rendering command includes decryption coding.

89. The method of claim 30 further comprising the steps of:

receiving at a network server a request associated with said WD for delivery of said data for rendering at said DRD;

determining if delivery of said data can be approved by at least one of said network and/or said DRD; and

if delivery is approved, said server processes the request including facilitating delivery of said data to said DRD.

90. The method of claim 89 further comprising the step of receiving said data from said server at said DRD.

91. The method of claim 90 wherein said data is received at said DRD via a data network supporting said DRD.

92. The method of claim 90 further comprising the step of rendering said data at said DRD following a rendering command received at said DRD by said WD.

93. The method of claim 92 wherein said rendering command includes a passcode.

94. The method of claim 92 wherein said rendering command includes decryption coding.

97. The method of claim 1 wherein said rendering command includes decryption coding.

98. The method of claim 1 wherein said commands enable WD user manipulation of said data during rendering of said data at said DRD using said WD.

99. The method of claim 98 wherein said DRD is at least one of: a presentation projector, a video display, and a photocopier.

100. A method using a wireless cellular telecommunications network adapted for supporting wireless hand held device users in voice and data communications and with brokering data between handheld wireless devices and publicly accessible data rendering devices where physical locations for publicly accessible data rendering devices are not previously known to the wireless hand held device users, steps of the method carried out by a hand held wireless device user comprising:

providing a request over the wireless cellular telecommunication network from a handheld wireless device (WD) to a remote data network

resource to locate at least one publicly accessible data rendering device (DRD) and identify operational readiness and rendering capabilities for the at least one publically accessible DRD matching user requested rendering capabilities also provided from the WD, said remote data network resource adapted to provide assistance to WD users to locate and assess publicly accessible DRDs by determining WD geographic location, locating at least one operational DRD located near the WD based on the WD geographic location and DRD rendering capabilities, and then identifying on the WD at least one DRD that is operational, matches user requested rendering capabilities and is geographically located near the WD;

receiving location information for at least one publicly accessible DRD at the WD from the network resource through the wireless cellular telecommunications network supporting wireless communication by the WD, said location information identifying at least one DRD geographically located near the WD that is operational and matches user rendering capabilities;

selecting only one DRD from the at least one publicly accessible DRD using the WD;

obtaining directions to the only one DRD using at least one of the WD, the wireless cellular telecommunications network, and GPS based on the geographic location of the WD;

selecting data for rendering at the DRD using the WD after the only one DRD is physically located; and

transferring data using the WD to the DRD for rendering.

105. The method of claim 100 wherein said commands enable the WD user to manipulate said data during its rendering at said DRD using said WD.

106. A location based service method using data communications network resources to assist a user of a GPS-enabled hand held wireless device supported by a wireless cellular telecommunications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, the publicly accessible DRD comprising at least

one of a printer, video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:

- receiving a user request provided over the wireless cellular telecommunications network from a user of the GPS-enabled hand held wireless device to a data communications network resource for assistance in locating a publicly accessible DRD based on geographic location information for the GPS-enabled wireless hand held device, rendering capabilities required by the user, and operational readiness of publicly accessible DRDs;

- the data communications network resource determining the geographic location of the GPS-enabled hand held wireless device;

- the data communications network resource using the geographic location of the GPS-enabled hand held wireless device to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device that is operational and matches the rendering capabilities required by the user;

- the data communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device;

- the user selecting only one publicly accessible DRD for rendering data; and

- the GPS-enabled hand held wireless device with the support of at least one of GPS and the wireless cellular telecommunications network providing the user directions to physically locate the only one publicly accessible DRD given the geographic location of the GPS-enabled hand held wireless device.

107. The method of claim 106 further comprising the steps of:

- receiving a request at a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data to the at least one publicly accessible DRD identified by the network resource; and

- said network server transferring said data to said at least one publicly accessible DRD in response to the request.

108. The method of claim 107 further comprising the step of said at least one publicly accessible printer receiving said data from said network server.

109. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of the wireless hand held device directly onto a user interface associated with the at least one publicly available DRD.

110. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from the wireless hand held device.

111. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a wireless authorization signal provided locally from the wireless hand held device.

112. The method of claim 106 further comprising the steps of:
a user of said GPS-enabled hand held wireless device physically locating said publicly accessible DRD;

the user of said GPS-enabled hand held wireless device transmitting a request to a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data said publicly accessible; and

said network server transferring said data to said publicly accessible DRD in response to the request.

113. The method of claim 112 further comprising the step of said publicly accessible DRD receiving said data from said network server.

114. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of said wireless hand held device directly onto a user interface associated with said publicly accessible DRD.

115. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from said wireless hand held device.

116. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from said network server after further receiving a wireless authorization signal provided locally from said wireless hand held device.

117. The method of claim 106 further comprising the steps of:
a user of a hand held wireless device physically locating a publicly accessible DRD;
the user of said hand held wireless device wirelessly transmitting data from said hand held wireless device to said publicly accessible DRD
said publicly accessible DRD receiving said data from said hand held wireless device; and
said publicly accessible DRD rendering said data.

X. EVIDENCE APPENDIX

NONE

XI. RELATED PROCEEDINGS APPENDIX

NONE



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Luis M. Ortiz

EXAMINER: Elahee, MD S

SERIAL NO.: 09/887,492

GROUP: 2614

FILED: 06/22/2001

ATTY DKT NO.: Ortiz-1001

TITLE: SYSTEMS, METHODS AND APPARATUSES FOR BROKERING DATA
BETWEEN WIRELESS DEVICES AND DATA RENDERING DEVICES

Please forward all correspondence to:

ORTIZ & LOPEZ, PLLC
Patent Attorneys
P.O. Box 4484
Albuquerque, NM 87196-4484

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
deposited as first class mail addressed to
Mail Stop Appeal, Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450,

on June 13, 2008

Signature

Luis M. Ortiz

Mail Stop Appeal

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' APPEAL BRIEF UNDER C.F.R. §1.192

I. REAL PARTY IN INTEREST

Luis M. Ortiz is the inventor of and also the real party in interest in the present invention. Mr. Ortiz is the "Appellant" entitled to bring forward this appeal.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 1-3, 7-11, 15-23, 30, 31, 88-94, 97-100, and 105-117 are pending in the application.

Claims 32 through 78 are withdrawn from consideration following a restriction requirement during early prosecution.

Claims 4-6, 12-14, 24-29, 79-87, 95, 96, and 101-104 are cancelled.

Claims 1-3, 7-11, 15-23, 30, 31, 88-94, 97-100, and 105-117 are the subject of this appeal. Of these appealed claims, claims 1, 15, 30, 100 and 106 are independent.

Claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100, 105-113 and 115-117 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864).

Dependent claims 10, 21 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Challener et al* (US 6,591,297).

Dependent claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Magro et al* (US 6,457,08).

Dependent claim 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Theimer** et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Ronen* (US. Pub. No. 2002/0156708).

IV. STATUS OF AMENDMENTS

None. No amendments were filed subsequent to final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The Applicants' invention is related to what can commonly be referred to as the field of location-based wireless services and also to wireless handheld data communication device applications.

The Basic Concept. At the time of Appellant's patent application filing, handheld wireless device users were generally restricted to viewing data using very small, device-based viewers having limited GUI functionality. For traveling handheld device users, data rendering devices (e.g., printers and video displays) are unavailable, locations are unknown or they are inconveniently located. At the time of Appellant's invention, mobile device users have limited access to data rendering resource and network resources necessary to utilize data retrieved through public wireless communication networks. Wireless device users were generally required to wait until access to a network data via wired or fixed computing devices having dedicated rendering peripherals and systems (e.g., personal computer with printing and display capabilities) became available. Such a limitation also required that users already know where rendering peripherals are located. For the remote wireless device user such as business travelers in airports or driving on the road, convenience and time have become important considerations in choosing how to access and view. Oftentimes, wireless device users are forced by circumstance to defer data retrieval until compatible equipment can be located or accessed, or users must rely on limited or inconvenient rendering systems and methods (e.g., back to the use of very small displays located on their handheld wireless devices). Unfortunately, many wireless device users forego data rendering plans altogether while traveling for business or pleasure because of the limitations in the state of the art when Appellant filed the present patent application. The present invention was filed with the United States Patent and Trademark Office by Appellant to present an invention that can overcome the shortfall in the wireless communications field by presenting a new location-based service to handheld wireless mobile device users.

More specific aspects of the *claimed* invention are summarized with reference to specific portions of Appellant's specification as follows:

Handheld Wireless Devices. Handheld Wireless devices (WDs) in accordance with the teaching of the claimed invention include wireless data telecommunication-enabled mobile phones, personal data assistants (PDAs), and smart phones, such as Blackberry and Palm handheld devices which are described throughout Appellant's specification and drawings.

Data Rendering Devices. Data Rendering Devices (DRDs) in accordance with the claimed invention include video monitors, Internet Kiosks, multimedia projectors and ATM machines, which have not previously been assigned to a user's handheld wireless device (WD) and are physically located in a publicly location that is generally unknown to users but openly accessible to the public and to public use. DRDs in accordance with Appellant's invention are meant to be public, and because of this their location is often not already known by or considered by the handheld wireless device (WD) user when requesting the assistance of a network to find a DRD.

Publically Accessible DRDs. It is important given the solution presented by Appellant that DRDs are "*publically accessible*" to handheld wireless device users when needed. Publicly available DRDs in accordance with the claimed invention and as written in the Summary of the Invention are "distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate." One or many DRDs can be located with the assistants of a telecommunication network and equipment for wireless device users (e.g., a cellular network), and DRD location is ideally based on the handheld device user's own physical location and/or a user's profile. Something is "public" as defined by *Merriam-Webster's Dictionary of Law (1996)* when it is "accessible or visible to the public."

Locate and Provide WDs Directions To DRDs. DRDs are located for WD users. Directions to a DRD are also provided to a WD user through the user's WD based on the geographic location of the WD (and its user) or the WD user profile. Providing directions to the DRDs, which can include a map, assists

users to physically locate publically accessible DRDs whose locations were not previously known to the WD user. Pages 26 and 27 of the specification describe these aspects of the claimed invention when describing Figures 9 and 10, as follows:

When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92. The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.

Referring to Figure 10, a flow diagram of DRD location and data delivery is illustrated. At the WD the user wanting to render data at a DRD can request the network to find a DRDs location 101. A network server will assist the WD as provided in Figure 9. The WD will receive DRD location information provided by the network 102. After DRD location is determined, the WD can have data delivered to the DRD either: directly from the WD 103 after physically locating the DRD, or via a request for data delivery through the network 104.

Determining Operational Readiness of DRDs. Yet another important feature of the present invention not taught or suggested by the prior art is the ability to use a network resource to check on the "*operational readiness*" of data rendering devices prior to a handheld wireless device user being sent by network resource to a DRD's location. The description indicates that a "status monitoring means 27" as shown in Figure 2 enables this functionality. It can be appreciated that time would be wasted if a user is sent to a malfunctioning or occupied DRD. "Operational" means "Fit for proper

functioning; ready for use: *[as in] an operational aircraft...*”, according to The American Heritage® Dictionary of the English Language, Fourth (2006, Houghton Mifflin Company). Also according to the American Heritage dictionary, “readiness” means “[p]repared or available for service, action, or progress: *I am ready to work.*” At page Appellant’s detailed description where Figure 11 is described, the following is written with respect to operation readiness:

Although a DRD may seem appropriate for temporary assignment to the WD/user for data rendering because of its proximity to and/or profile match with the WD/user, it may not be available for rendering. For example, a DRD may not be available for rendering because it is out of service or has already reached its schedules/queued/potential capacity for data delivery/rendering based on a report by dedicated status monitoring means at the DRD.

Consistent with the above summary of the invention, and in accordance with the requirements of 37 CFR §41.37(c)(1)(x), direct association to specific locations in the specification drawings, of the claim language for claims 1, 15, 30, 100 and 106 and specifically distinguishing each independent claim from the art of record (including underlined portions for specific aspects that are not suggested by, or motivated by a combination of, the cited art), is shown by figure number and element identifier, and by page and line number, as indicated below:

CLAIM 1	Location within Specification/Drawings
A method of brokering data between handheld wireless devices and publicly available data rendering devices with locations and capabilities not previously known to the handheld wireless devices or their users, comprising:	FIGS. 4 to 12. ABSTRACT Pages 11-12 of Specification.
identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) located at a fixed, publicly accessible location not yet known to said WD or	FIG. 4; FIG. 6; FIG. 7. Page 11 of Specification: “DRDs can generally be considered “undedicated” rendering devices (e.g., “unassigned” as a resource and/or generally available and open to the acceptance and rendering of data from unfamiliar users). DRDs can be located generally

its user;	throughout an enterprise or private campus, or be distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate. ”
<u>providing a request from said WD through a wireless telecommunications network supporting voice and data communications by said WD to a remote network resource for said remote network resource to locate at least one DRD, said at least one DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said network resource further adapted to identify the location, rendering capabilities and operational status of at least one DRD in accordance with at least one of said WD’s geographic location and a WD user profile associated with said WD;</u>	<p>FIG. 7 to 9; FIG. 9; FIG. 10; FIG. 12.</p> <p>Page 11 of Specification: “In accordance with a feature of the present invention, DRDs can receive data directly from WDs and/or through networks after/with coordination by WDs with networks providing data to DRDs. ”</p> <p>“In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices.”</p> <p>“In accordance with another feature of the present invention, a WD can be used to locate a DRD based on a WD and/or WD user’s location and/or profile.”</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
<u>said network resource identifying the location, rendering capabilities and operational status of at least</u>	<p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification: “In accordance with another feature of the present invention, user/WD</p>

<p><u>one DRD based on at least one of said WD's location and said WD user profile;</u></p>	<p>location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.</p> <p>Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)."</p> <p>Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity). "</p> <p>Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92."</p>
<p><u>said network resource providing said WD with location information for at least one publicly accessible DRD;</u></p>	<p>FIG. 10.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6."</p>
<p>selecting a DRD with said WD;</p>	<p>FIG. 6; FIG. 7</p> <p>Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."</p>

<p><u>at least one of said WD, said wireless telecommunications network and said network resource providing navigable directions on said WD to physically locate a DRD selected with said WD based on the geographic location of said WD; and</u></p>	<p>FIG. 10.</p> <p>Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62."</p> <p>Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."</p>
<p>transferring said data at the request of said WD to said DRD from at least one of an email box or a memory associated with said WD, said data transferred to said DRD for rendering.</p>	<p>FIGS. 4 to 6; FIGS. 8 to 10.</p> <p>Page 25: "A WD user can render the data directly at the DRD if its location is known to the user, or the user can request networks in communication with the WD for assistance in locating an appropriate DRD. DRD location can be based on the user's location or proximity to DRDs (known or determinable by the network or WD) and/or can be based on user requirements provided to the network or embodied in a WD user profile."</p> <p>"Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63. Referring to Figure 7, the WD can first be used by the WD user to request network assistance in locating an appropriate DRD 71. After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."</p>

CLAIM 15	Location within Specification/Drawings
<p>A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), the DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, wherein the DRD is not assigned to the WD, the DRD's physical location is not known by the WD and its user, and the DRD is publicly accessible to all WD users, wherein a WD user performs the following steps at the WD:</p>	<p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD</p>

	<p>20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p>identifying data with the WD to render at a publicly accessible DRD;</p>	<p>FIG. 4.</p> <p>Page 24: "In accordance with aspects of using the present invention methods of use will now be described. Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD."</p>
<p><u>providing a DRD locator request with the WD to public communications network resources through a wireless cellular communications network supporting wireless voice and data communications by the WD, the DRD locator request being provided for said public communication network resources to find at least one publically accessible DRD located near the WD, the locator request further including WD geographic location information;</u></p>	<p>FIG. 9; FIG. 10; FIG 12.</p> <p>Page 19: "WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>receiving DRD location information and rendering capabilities at the WD for the at least one publicly accessible DRD located near the WD, wherein DRD location information is based on said WD geographic location information;</u></p>	<p>FIG. 10.</p> <p>Page 19: "WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information."</p>

	<p>“Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
selecting a DRD with the WD for rendering said data;	<p>FIG. 6; FIG. 7</p> <p>Page 19: “The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user.”</p>
<p><u>providing directions to the WD to physically locate the DRD selected by the WD, said directions provided to the WD from at least one of the WD and the network resource based on the WD geographic location information;</u></p>	<p>FIG. 10.</p> <p>Page 25: “If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62.”</p> <p>Page 26: “The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.”</p>
physically locating the DRD at the DRD’s publicly accessible location; and	<p>Page 25: “After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73.”</p>
requesting at the WD that the data be transferred to the DRD through at least one of said public wireless cellular communications network and a short range wireless communications link with the DRD.	<p>FIGS. 4 to 6; FIGS. 8 to 10.</p> <p>Page 25: “A WD user can render the data directly at the DRD if its location is known to the user, or the user can request networks in communication with the WD for assistance in locating an appropriate DRD. DRD location can be based on the user’s location or proximity to DRDs (known or determinable by the network or WD) and/or can be based on user requirements provided to the network or embodied in a WD user profile.”</p> <p>“Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63. Referring to Figure 7, the WD can first be used by the WD user to request network assistance in locating an appropriate DRD 71. After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73.”</p>

CLAIM 30	Location within Specification/Drawings
<p>A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:</p>	<p>FIGS. 4 to 12.</p> <p>ABSTRACT</p>
<p><u>using a wireless device (WD) to request support through a wireless cellular telecommunications network to a remote server adapted to maintain location and capability information for data rendering devices, to locate at least one publicly accessible data rendering device (DRD) and provide publicly accessible DRD capability information stored in the remote server, and wherein the at least one DRD is not previously assigned to the WD and its location not previously known to the WD or its user, and the at least one DRD is physically accessible to all WD users, wherein locating of at least one DRD is facilitated by said remote server in cooperation with the wireless cellular telecommunications network in accordance with at least one of a WD user profile and the geographic location of the WD;</u></p>	<p>FIGS. 10 to 12.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and/or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>receiving DRD location and capability information at the WD for at least one DRD located near the WD;</u></p>	<p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification:</p> <p>"In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.</p> <p>Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)."</p>

	<p>Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity)."</p> <p>Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92."</p>
selecting a DRD with said WD for rendering data;	<p>FIG. 6; FIG. 7</p> <p>Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."</p>
<u>the network resource verifying operational readiness of the DRD selected by the WD and providing directions on the WD for the user to follow to physically locate the DRD selected with the WD if the DRD selected by the user is deemed operational, the directions provided to the WD based on the geographic location of the WD;</u>	<p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification: "In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.</p> <p>Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)."</p> <p>Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity)."</p> <p>Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location</p>

	based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92.”
selecting data with the WD for rendering at the DRD once the DRD has been physically located by the user; and	<p>Page 25: “After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73.”</p> <p>FIGS. 4 to 6; FIGS. 8 to 10.</p> <p>Page 25: “Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63.”</p>
<u>providing the data from at least one of a memory and email box associated with the WD, at the request of the WD, to the DRD for rendering.</u>	<p>FIG. 4.</p> <p>Page 24: “Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD.”</p> <p>Page 24: “Enhanced messaging applications have also been developed in response to the convergence of voice and data networks and improving wireless technology. Unified Messaging solutions allow carriers and Internet service providers to manage customer e-mail, voice messages and fax images and can facilitate delivery of these communications to PDAs, telephony devices, pagers, personal computers and other capable information retrieval devices, wired or wireless.”</p>

CLAIM 100	Location within Specification/Drawings
A method using a wireless cellular telecommunications network adapted for supporting wireless hand held device users in voice and data communications and with brokering data between handheld wireless devices and publicly accessible data rendering devices where physical locations for publicly accessible data rendering devices are not previously known to the	<p>FIG. 1; FIGS. 8-12.</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and/or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to</p>

<p>wireless hand held device users, steps of the method carried out by a hand held wireless device user comprising:</p>	<p>the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>providing a request over the wireless cellular telecommunication network from a handheld wireless device (WD) to a remote data network resource to locate at least one publicly accessible data rendering device (DRD) and identify operational readiness and rendering capabilities for the at least one publically accessible DRD matching user requested rendering capabilities also provided from the WD, said remote data network resource adapted to provide assistance to WD users to locate and assess publicly accessible DRDs by determining WD geographic location, locating at least one operational DRD located near the WD based on the WD geographic location and DRD rendering capabilities, and then identifying on the WD at least one DRD that is operational, matches user requested rendering capabilities and is geographically located near the WD;</u></p>	<p>FIG. 1; FIGS. 8-12.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p><u>receiving location information for at least one publicly accessible DRD at the WD from the network resource through the wireless cellular telecommunications network</u></p>	<p>FIG. 1; FIGS. 8-12.</p> <p>Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources</p>

<p><u>supporting wireless communication by the WD, said location information identifying at least one DRD geographically located near the WD that is operational and matches user rendering capabilities;</u></p>	<p>(e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."</p>
<p>selecting only one DRD from the at least one publicly accessible DRD using the WD;</p>	<p>FIG. 6; FIG. 7</p> <p>Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."</p>
<p><u>obtaining directions to the only one DRD using at least one of the WD, the wireless cellular telecommunications network, and GPS based on the geographic location of the WD;</u></p>	<p>FIG. 10.</p> <p>Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62."</p> <p>Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."</p>
<p>selecting data for rendering at the DRD using the WD after the only one DRD is physically located; and</p>	<p>Page 25: "After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."</p> <p>FIGS. 4 to 6; FIGS. 8 to 10.</p>

	<p>Page 25: “Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63.”</p>
<p>transferring data using the WD to the DRD for rendering.</p>	<p>FIG. 4.</p> <p>Page 24: “Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD.”</p>

CLAIM 106	Location within Specification/Drawings
<p>A location based service method using data communications network resources to assist a user of a GPS-enabled hand held wireless device supported by a wireless cellular telecommunications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, the publicly accessible DRD comprising at least one of a printer, video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:</p>	<p>Page 5: “Wireless Intelligent Networks (WIN) are generally known as the architecture of the wireless switched network that allows carriers to provide enhanced and customized services for mobile telephones.”</p> <p>Pages 6-7: “Wireless location based services now being deployed on wireless networks enable wireless service providers to utilize information regarding the geographic location of wireless devices/callers to provide public safety (e.g., E-911), location-sensitive billing, location-specific information (e.g., advertising) and tracking services.”</p> <p>Page 11: “In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices.”</p> <p>Page 17: “Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user=s location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12.”</p> <p>FIG. 4; FIG. 6; FIG. 7.</p> <p>Page 11 of Specification: “DRDs can generally be considered “undedicated” rendering devices (e.g., “unassigned” as a resource and/or generally available and</p>

	<p>open to the acceptance and rendering of data from unfamiliar users). DRDs can be located generally throughout an enterprise or private campus, or be distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate.”</p>
<p><u>receiving a user request provided over the wireless cellular telecommunications network from a user of the GPS-enabled hand held wireless device to a data communications network resource for assistance in locating a publicly accessible DRD based on geographic location information for the GPS-enabled wireless hand held device, rendering capabilities required by the user, and operational readiness of publicly accessible DRDs;</u></p>	<p>FIG. 7 to 9; FIG. 9; FIG. 10; FIG. 12.</p> <p>Page 11 of Specification:</p> <p>“In accordance with a feature of the present invention, DRDs can receive data directly from WDs and/or through networks after/with coordination by WDs with networks providing data to DRDs.”</p> <p>“In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices.”</p> <p>“In accordance with another feature of the present invention, a WD can be used to locate a DRD based on a WD and/or WD user’s location and/or profile.”</p> <p>Page 17: “Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user’s location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12.”</p> <p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers,</p>

	<p>photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p>
<p><u>the data communications network resource determining the geographic location of the GPS-enabled hand held wireless device;</u></p>	<p>Page 17: “Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user’s location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12.”</p> <p>Page 19: “In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information.”</p>
<p><u>the data communications network resource using the geographic location of the GPS-enabled hand held wireless device to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device that is operational and matches the rendering capabilities required by the user;</u></p>	<p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise.”</p> <p>FIG. 9; FIG. 12.</p> <p>Pages 11-12 of Specification: “Another feature of the present invention allows the network to verify DRD</p>

	<p>availability (e.g., operational readiness).”</p> <p>Page 18: “A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity).”</p>
<p><u>the data communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device;</u></p>	<p>Page 19: “DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD’s physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD’s 7 proximity to the a roaming WD’s location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user’s WD 6.”</p>
<p>the user selecting only one publicly accessible DRD for rendering data; and</p>	<p>FIG. 6; FIG. 7</p> <p>Page 19: “The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user.”</p>
<p><u>the GPS-enabled hand held wireless device with the support of at least one of GPS and the wireless cellular telecommunications network providing the user directions to physically locate the only one publicly accessible DRD given the geographic location of the GPS-enabled hand held wireless device.</u></p>	<p>FIG. 10.</p> <p>Page 25: “If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62.”</p> <p>Page 26: “The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.”</p>

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL – ISSUES

Whether independent **claim 1** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 15** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 30** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 100** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 106** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

VII. ARGUMENT

A. GROUPING OF CLAIMS

Five (V) groups of claims are being appealed as follows:

GROUP I CLAIMS:

Group I consists of claims 1-3, 7-11 and 14. **Claim 1** is independent. Claims 2-3, 7-11 and 14 stand or fall with independent claim 1. Independent claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP II CLAIMS:

Group II consists of claim 15 to 22. **Claim 15** is independent. Claims 16 to 22 stand or fall with independent claim 15. Independent claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*

GROUP III CLAIMS:

Group III consists of claims 30, 31, 88 to 94 and 97 to 99. **Claim 30** is independent. Claims 31, 88 to 94 and 97 to 99 stand or fall with independent claim 30. Independent claim 30 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP IV CLAIMS:

Group IV consists of claims 100 and 105. **Claim 100** is independent. Claim 105 stands or falls with independent claim 100. Independent claim 100 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP V CLAIMS:

Group V consists of claims 106 to 117. **Claim 106** is independent. Claims 107 to 117 stand or fall with independent claim 106. Independent claim

106 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

B. APPLICABLE LEGAL STANDARD

The relevant statute cited in rejecting Appellants' claims is 35 U.S.C. §103(a). The obligation of the Examiner to go forward and produce reasoning and evidence in support of obviousness under 35 U.S.C. §103 is clearly defined at M.P.E.P. §2142:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

M.P.E.P. §2143 sets out the three basic criteria that a patent examiner must satisfy to establish a *prima facie* case of obviousness necessary for establishing a rejection to a claim under 35 U.S.C. §103:

1. some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
2. a reasonable expectation of success; and
3. the teaching or suggestion of all the claim limitations by the prior art reference (or references when combined).

In the absence of such a *prima facie* showing of obviousness under 35 U.S.C. §103 by the examiner (assuming there are no objections or other grounds for rejection), an Applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443 (Fed. Cir. 1992).

Thus, in order to support an obviousness rejection under 35 U.S.C. §103, the Examiner is obliged to produce evidence compelling a conclusion that each of the aforementioned criteria has been met. If the Examiner fails to produce such a conclusion for each of the aforementioned criteria, the rejection must be withdrawn.

To overcome the unpatentable rejection, the Appellant need only demonstrate that not all elements of a *prima facie* case of obviousness have been met, *i. e.*, show that *Theimer et al* in view of *Hanada* fails teach or suggest every element in each of the Appellants' independent claims associated with the relevant reference used for their rejection.

C. UPTATENTABILITY UNDER 35 U.S.C. 103(a) IS NOT ESTABLISHED USING *THEIMER ET AL* IN VIEW OF *HANADA*.

Theimer et al is the predominant reference used as a basis to reject Appellant's independent claims 1, 15, 30, 100 and 106. It is combined with *Hanada* to incorporate *Hanada's* teaching of a printer as a rendering device capable of notifying by short range communication to an information providing apparatus such as a computer about the amount of time that it will take for data to be printed. Examiner believes that a teaching of rendering time is also a teaching of "operational readiness" for a remote data rendering device. This is simply not so.

i. Regarding "Operational Readiness."

Hanada is combined with *Theimer et al* to teach "operational readiness" as claimed by Appellant. Operational readiness is found in claims 1, 30, 100 and 106. *Hanada* primarily describes the printing of images from a still camera connected wirelessly via infrared with a printer. Perhaps *Hanada* is most unique in its ability to notify the data providing device about how much time it will take to print data at the printer. Indeed, many other references could have also been used in combination with *Theimer et al* for equipment capable of rendering data and notifying a computer about how long a print job might take or if a print job has failed. Appellant does not contest the existence of such capabilities in printers, like that taught by *Hanada* or networked printers that are widely available. It is important to note, however, that *Hanada* does not

notify information providers of any other condition other than expected print time for current print jobs. It is also important to note that this time-based "status" provided by *Hanada* is provided after the information provider already engaged with the printer or data has already been presented, which implies that the user is already engaged with and intends to utilize only one particular printer. It is also noteworthy that a WD is never presented with other rendering options, which implies user dedication to a single printing source. Therefore, *Hanada* is limited in the type of information provided, by when it is provided and how it is provided (e.g., via short range infrared communications after data is presented).

Fig 1, item 2; column 2, lines 48-52, lines 66-67, and column 3, lines 1-5 in *Hanada* are cited in support of a printer as a data rendering device. That the *Hanada* printer is a data rendering device is not disputed. Fig 1, item 2; column 2, lines 48-52, lines 66-67, and column 3, lines 1-5, 13-20, 34-43 and 56-63 in *Hanada* are cited in support of teaching the identification of operational status; yet all that is taught by these section of *Hanada* is the concept of determining current document print completion time and a enabling time status calculation, which are status that is provided after, not before, a user has already decided to use the one printer. The short range communication taught in *Hanada* also implied that the user is in close proximity (in front of) the printer, which would be necessary for infrared communications. The sections of *Hanada* cited by Examiner for support of operational readiness are provided below:

~~fying the information apparatus of it.~~ The information apparatus transmits the print data to the printer when the first period of time is elapsed. Thus, the information apparatus needs not be kept in a status of reception or transmit data for inquiry so as to inquire about a status of the printer. 5
Consequently, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

Preferably, the step of calculating the first period of time includes a step of calculating a period of time it takes before 10
image formation for print data which is currently in the process of image formation is completed.

The printer calculates a period of time it takes before the currently processed image formation is completed for notifying the information apparatus of it. When the period of time is elapsed, the information apparatus transmits print data to the printer. Thus, even when a plurality of information apparatuses inquire about the status of the printer, each of the information apparatuses needs not be kept in the status of reception or transmit data for inquiry. Accordingly, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

....

The printer calculates a period of time it takes before all of the currently processed image formation and that in a stand-by status are completed for notifying the information apparatus of it. The information apparatus transmits print data to the printer when the period of time is elapsed. Thus, even when three or more information apparatuses inquire about the status of the printer, each information apparatus needs not be kept in the status of reception or transmit data for inquiry. Therefore, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

....

The printer calculates the first period of time it takes before it becomes ready to receive print data for notifying the information apparatus of it. The information apparatus transmits print data to the printer when the first period of time is elapsed. Thus, the information apparatus needs not be kept in the status of reception for inquiring about the status of the printer or transmit data for inquiry. ~~Accordingly, the~~

Clearly, *Hanada* is only concerned about how much "processing time" a print job will take. This type of status is not all that must be considered in Appellant's definition of "operational status". Appellant's teaching of operational readiness is to determine if a DRD is fit for proper functioning, ready for use, or otherwise prepared or available for service, action, or progress. Processing time is irrelevant if the DRD is not ready or available for service. In describing Figure 11, Appellant's detailed description states the following with respect to operation readiness:

Although a DRD may seem appropriate for temporary assignment to the WD/user for data rendering because of its proximity to and/or profile match with the WD/user, it may not be available for rendering. For example, a DRD may not be available for rendering because it is out of service or has already reached its schedules/queued/potential capacity for data delivery/rendering based on a report by dedicated status monitoring means at the DRD.

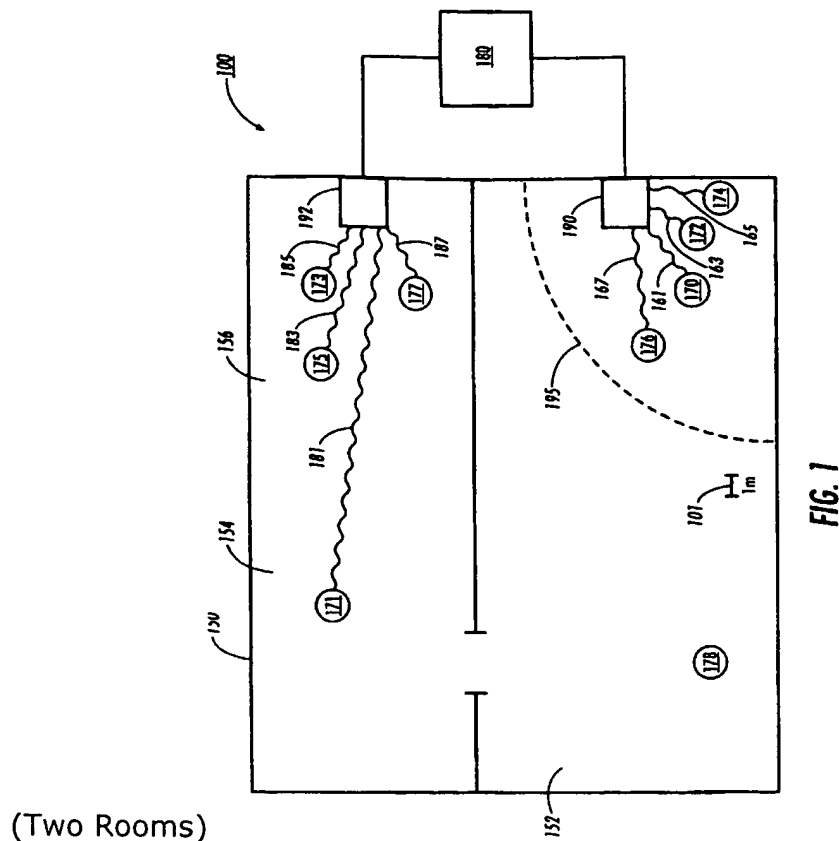
By not teaching operational readiness as taught by Appellant in Independent claims 1, 30, 100 and 106, the combination of the teachings of *Theimer et al* with a reference like *Hanada* fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3, and also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* fails to teach or suggest an invention that will remotely determine the "operational readiness" of a data rendering devices on behalf of wireless devices, as taught by Appellant and claimed in independent claims 1, 30, 100 and 106. But this is just one point of failure by *Theimer et al* in view of *Hanada*; the balance of Examiner's rejection will focus on specific teachings by *Theimer et al*.

What is apparently now most important in the analysis of whether *Theimer et al* in combination with *Hanada* would render Appellant's independent claims unpatentable is to focus on the specific teaching of *Theimer et al*. *Theimer et al* will likely be the core reference for analysis by the Board and, therefore, the rest of Appellant's argument remains focused on *Theimer et al*. Examiner apparently is of the same opinion having heavily emphasized aspects this reference throughout the prosecution history.

Appellant can show that the combination of the teachings of *Theimer et al* with *Hanada* fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3, and also fails to provide "some suggestion or motivation, either in the references themselves or in the

ii. Regarding “Public Accessibility.”

Application No.: 09/887,492
Ortiz-1001



In describing Figure 1, *Theimer et al* is primarily concerned with communication (data transfer) between electronic devices located in two rooms of a building. Figure 2 clearly shows a single room deployment for the *Theimer et al* spatial location and selective data transfer concept used between electronic devices in close proximity to each other. The detailed description for Figure 1 states:

In FIG. 1, the spatial localizing modules 190 and 192 track a plurality of electronic devices, indicated as circles 170–178. The electronic devices are distributed throughout two rooms 152 and 154 of a building 150, with a spatial localizing module respectively located in each room. A scale marker 101 representing a distance of one meter is shown for scale. The electronic devices 170–178 in the building 150 may be, for example, personal digital assistants, two-way pagers, laptop or notebook computers, computer tablets, or any other electronic device capable of wireless communication through radio, infrared, acoustic or other transmission links. In FIG. 1, communication links for data transmission are generically illustrated by wavy lines 161, 163, 165, 167, and 181, 183, 185, and 185.

Examiner cites to the Abstract, column 4, lines 42-47, 52-66, and column 5, lines 14-19, for the concept of data rendering devices being located at fixed, publicly accessible locations not yet known to a PDA or its user. The abstract and Figures 1 and 2 clearly teach that devices are located in close proximity to each other, and sometime in the very same room. The *Theimer et al* Abstract states:

A system for transferring digital information to spatially localizable portable electronic devices has a plurality of portable electronic devices, with each portable electronic device supporting wireless communication. A spatial module determine spatial location with submeter precision for each of the plurality of electronic devices, and communication module is connected to the spatial localizing module for mediating wireless communication between portable electronic devices. A user can define electronic data transfers between portable electronic devices in **user determined** spatial locations with submeter precision. Data transfers are possible to adjacent electronic devices, electronic devices within a defined radius, electronic devices along a defined bearing or having specific orientation, or even located within a defined set of regions or rooms.

[Emphasis added.]

It is clearly described by *Theimer et al* that the preferred embodiment therein is to use CCD cameras to determine the physical location of an electronic device is a defined space (e.g., a single or neighboring room) given the close spatial proximity of the electronic devices shown and described therein. The main thrust of *Theimer et al* is clearly to enable the short range (or defined range and controlled) transfer of data to select devices that are located near each other in the proximity of other electronic devices that should not receive the transfer. Spatial location control as taught by *Theimer et al* enables users to control what particular portable devices will receive a transfer from another portable device. The primary operational examples provided in *Theimer et al* is in the "adjacent transfer" of data from one portable device,

such as a PDA, to one or a select group of devices, such as other PDAs, in close proximity to the transferring device.

Appellant has previously shown Examiner that *Theimer et al* is interested in submeter applications and specifically states this at Column 2, lines 8-13:

“a range of spatial locations and orientations can be specified with transmission to adjacent electronic devices, to all electronic devices in a room, to all electronic devices in a particular orientation or direction, or even to all electronic devices at spatial locations within a specified range (e.g., within two meters).”

Theimer et al goes further by states that a user of the electronic devices (e.g., located within the same room) can “define electronic data transfers between portable electronic devices in user determined spatial locations with submeter precision.”

Theimer clearly shows that its features are most evidently advantageous when used in submeter applications and shows specific examples within the same physical space (i.e., a room) where IR transmitters and CCD cameras enable highly precise spatial location of tagged electronic devices.

Column 4, lines 42-47, 52-66 and column 5, lines 14-19 of *Theimer et al* cited by Examiner were again consulted by Appellant in preparation of this Appeal Brief, but these sections of the *Theimer et al* detailed disclosure do not reveal the aspect of fixed, publicly accessible data rendering devices not yet known to wireless devices selected for rendering data selected from a portable device (PDA). What is clear from these cited portions of *Theimer et al*, however, is that the transfer of data from one portable device to another within submeter range is its predominant feature. In fact enabling communications at as small as centimeter or millimeter distances between electronic devices is further discussed at column 4, lines 42-50, which provides:

In operation, the system 100 is capable of determining both relative and absolute spatial location of other electronic devices with submeter precision, and mediate transmission or reception of data only to specified electronic devices 45 170-178 based on the relative or absolute spatial location of those electronic devices. In certain preferred embodiments discussed later in connection with FIG. 2, centimeter or even millimeter scale spatial localization is possible, however, for 50 many applications submeter precision is adequate. ~~Data~~

The combination of *Theimer et al* with *Hanada* clearly fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3. *Theimer et al* in view of *Hanada* does not teach or suggest fixed, publicly accessible data rendering devices not yet known to a wireless device that are operational and can be selected using communications network support based on wireless device location for rendering data selected from a wireless device, and with directions provided to the wireless devices so that the data rendering devices can be physically located. This is what is being claimed by Appellant and claimed in independent claims 1, 15, 30, 100 and 106.

Theimer et al in view of *Hanada* also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* does not provide some suggestion or motivation that fixed, publicly accessible data rendering devices that are verifiably operational and not yet known to wireless devices that can be presented to wireless devices to select for rendering data selected from a wireless device, and that directions to physically find a selected data rendering device can be provided to the wireless devices, as taught by Appellant and claimed in independent claims 1, 15, 30, 100 and 106. The location of electronic devices taught in *Theimer et al* and *Hanada* are already generally known. Locating unknown, publicly accessible rendering device on behalf of a wireless device using communications network resources is not taught or suggestion in *Theimer et al* and *Hanada*. The provision of navigable directions to wireless devices in order to physically locate data rendering device is never discussed by *Theimer et al* and *Hanada*.

iii. Regarding "Locating DRDs."

Examiner states that *Theimer et al* teaches "providing a request from a WD through a telecommunications network supporting voice and data communications by the WD to remote network resources for the remote network resource to locate at least one DRD, the network resource further adapted to identify the location, rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD." Column 1, lines 57-65, column 4, lines 42-62, and the public availability of GPS for navigation by civilians since the year 1980 is cited by Examiner as support for this argument. The cited sections were consulted, but do not reveal what is suggested by Examiner. *Theimer et al* does not teach providing a request from a wireless device through a telecommunications network supporting voice and data communication by the wireless device to a remote network resource for the remote network resource to identify the location and rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD.

Appellant does not dispute that GPS has been available for some time. In fact patents related to GPS were directly cited in the Background of Appellant's patent application. *Theimer et al* only mentions the use of differential GPS for possible refinement of spatial localizing modules as needed for further teaching of the spatial location and precise data transfer concept described with respect to Figure 1 in the *Theimer et al* specification:

~~hardware.~~ **Multiple spatial localizing modules connected to network 180 can be used, and a wide variety of mechanisms for determining spatial location can be employed, including image based techniques, ultrasound or other acoustic techniques, or even radio based techniques such as differential GPS.**

25

Theimer et al, however, would only teach and motivate one skilled in the art to utilize spatial GPS to determine the precise spatial location of electronic devices

located within about two meters of each other in the same environment (e.g., like the room of Figure 2) to enable the controlled transfer of data from one particular device to another (e.g., adjacent device) with submeter precision. *Theimer et al* in view of *Hanada* does not suggest the use of GPS for more than facilitating submeter precision for data transfer between closely proximate devices. Recall that *Hanada* also teaches proximate, infrared data communication between a printer and a information device (e.g., handheld wireless device); therefore, the combination of *Theimer et al* with *Hanada* still fails to teach the ability to provide a request from a wireless device through a telecommunications network supporting voice and data communication by the wireless device to a remote network resource for the remote network resource to identify the location and rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD.

Understanding the objective in *Theimer et al* is to enable accurate submeter data transfer between devices is important because it becomes clear how *Theimer et al* substantially differentiates and departs from Appellant's claimed invention. Appellant's claimed invention provides for a much broader (distant) use of GPS where DRDs unknown, public places are first located by a network resource on behalf of a wireless device based on the wireless devices GPS location and/or user profile before a DRD can be selected and then physically located using navigable directions to obtain data transferred to the DRD for rendering. Directions are not taught, suggested, or required in *Theimer et al*. In fact, the *Theimer et al* teaching would only be useful if used in Appellant's invention after a data rendering device has already been found based on the wireless device's geographic location, selected using the wireless device and physically located by using navigable directions on the wireless devices. None of this is taught by *Theimer et al* in view of *Hanada*. *Theimer et al* in view of *Hanada* simply does teach or suggest the use of communications network resources to assist a wireless device in locating an operational data rendering device that is publicly accessible and located near the wireless device,

and then provide navigable direction to the wireless device so that the data rendering device can be physically located.

Therefore, *Theimer et al* in view of *Hanada* again fails in “teaching or suggestion of all the claim limitations by the prior art reference” under M.P.E.P. §2143 criteria 3. *Theimer et al* in view of *Hanada* does not teach or suggest locating DRDs in unknown, public places by a network resource on behalf of a wireless device based on the wireless devices GPS location and/or user profile before a DRD is selected and then physically located for data to be transferred to the DRD for rendering. *Theimer et al* in view of *Hanada* also fails to provide “some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings” as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* fails to provide some suggestion or motivation that GPS and/or a user profile can be used to locate DRDs in unknown, public places on behalf of a wireless using a network resource device based on the wireless devices GPS location and/or user profile before a DRD is selected by the WD and then enabling the WD to physically locate with the DRD using navigable directions.

iv. Regarding “Providing WD Directions to Located DRDs.”

Examiner states that *Theimer et al* teaches providing a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device. Examiner once again cites column 1, lines 57-65, and column 4, lines 25-27 and 42-62 for support of these important aspects of Appellant’s claimed invention. These sections were consulted in preparation of this argument, yet support for providing DRD location information to a wireless device and then providing navigable direction on the wireless device to physically locate a DRD selected with the wireless device based on the geographic location of the

wireless device was not found in *Theimer et al.* *Theimer et al* does not teach or suggest providing directions from a first device to another using the geographic location of the first device. This is clearly because the physical location of devices taught in *Theimer et al* is already known and it is merely the spatial location at submeter accuracy for each device therein that is of primary interest in *Theimer et al.* Nowhere in the combined specifications of in view of *Theimer et al* in view of *Hanada* is it taught or suggested that direction for physically locating a DRD can be provided by a network resource to a wireless device.

Once again, *Theimer et al* in view of *Hanada* again fails in “teaching or suggestion of all the claim limitations by the prior art reference” under M.P.E.P. §2143 criteria 3 and fails to provide “some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings” as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* in view of *Hanada* does not teach or suggest providing a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device. *Theimer et al* combined with *Hanada* also fails to provide some suggestion or motivation to provide a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device.

D. SUMMARY OF ARGUMENTS AND CONCLUSION

The following Claims Appendix (VIII) provides a listing of the appealed claims.

In summary, Applicant's claimed invention satisfies a long felt but unfulfilled need for roaming wireless device users such as business travelers to be able to find the unknown location of publicly available data rendering devices so that the roaming wireless device user can view or print electronic documents that are not easily viewable over their wireless handheld devices. *Theimer et al* in view of *Hanada* does not address or fulfill this need, nor does the combination of these references suggest Appellant's solution as claimed.

Theimer et al in view of *Hanada* does not suggest the use of wireless telecommunications networks to locate publicly accessible data rendering devices based on wireless device location, determine the operational readiness of data rendering devices, suggest data rendering devices located near the wireless device location for selection and then provide the wireless device with directions over the wireless device to physically find the data rendering device. Examiner has not met the requirements of MPEP to reject Appellant's claims 1, 15, 30, 100 and 106 as unpatentable under 35 U.S.C. 103(a) over *Theimer et al* in view of *Hanada*. Therefore, Appellant respectfully requests that the Board reverse Examiner and direct that Appellant's application be processed for prompt issuance.

Appellants respectfully submit that their arguments as well as the specification and prosecution record support that claims 1, 15, 30, 100 and 106 are independently allowable. Furthermore, Appellants submit that claims 2-3, 7-11, 14, 16-23, 31, 88-94, 97-99, 105, and 107-117 are allowable given their dependence upon their respective independent claims that have been shown to be allowable.

Appellant has proven that independent claims 1, 15, 39, 100 and 106, of the currently appealed application, are not unpatentable over *Theimer et al* in view of *Hanada*. Appellant now respectfully requests that the Board reverse the rejections of claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100,

105-113 and 115-117 and instruct the Examiner to process claims 1-3, 7-11, 14-23, 30, 31, 88-94, 97-100, and 105-117 for early issuance.

Respectfully submitted,



Luis M. Ortiz
Attorney and Appellant
Attorney Registration No. 36,230
Telephone: (505) 314-1311
E-mail: lortiz@olpatentlaw.com

DATE: *June 13, 2008*

VIII. CLAIMS APPENDIX

1. A method of brokering data between handheld wireless devices and publicly available data rendering devices with locations and capabilities not previously known to the handheld wireless devices or their users, comprising:

identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) located at a fixed, publicly accessible location not yet known to said WD or its user;

providing a request from said WD through a wireless telecommunications network supporting voice and data communications by said WD to a remote network resource for said remote network resource to locate at least one DRD, said at least one DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said network resource further adapted to identify the location, rendering capabilities and operational status of at least one DRD in accordance with at least one of said WD's geographic location and a WD user profile associated with said WD;

said network resource identifying the location, rendering capabilities and operational status of at least one DRD based on at least one of said WD's location and said WD user profile;

said network resource providing said WD with location information for at least one publicly accessible DRD;

selecting a DRD with said WD;

at least one of said WD, said wireless telecommunications network and said network resource providing navigable directions on said WD to physically locate a DRD selected with said WD based on the geographic location of said WD; and

transferring said data at the request of said WD to said DRD from at least one of an email box or a memory associated with said WD, said data transferred to said DRD for rendering.

2. The method of claim 1 including a step wherein said DRD renders the data only after a render command is provided to said DRD through said WD.

3. The method of claim 2 wherein said render command includes a passcode.

7. The method of claim 1 wherein the data is rendered by said DRD after said render command is provided by a WD user on a user interface associated with said DRD.

8. The method of claim 1 wherein the data is retrieved from a memory assigned to the WD user only after the WD user provides a passcode to said DRD.

9. The method of claim 8 wherein said passcode is provided to said DRD by the WD.

10. The method of claim 8 wherein said passcode is provided at a user interface associated with said DRD.

11. The method of claim 8 wherein said command includes decryption coding.

14. The method of claim 1 including a step wherein said network resource provides the WD with a passcode for use on an interface integrated with said DRD to cause said DRD to render the data.

15. A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), the DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, wherein the DRD is not assigned to the WD, the DRD's physical location is not known by the WD and its user, and the DRD is

publicly accessible to all WD users, wherein a WD user performs the following steps at the WD:

- identifying data with the WD to render at a publicly accessible DRD;
- providing a DRD locator request with the WD to public communications network resources through a wireless cellular communications network supporting wireless voice and data communications by the WD, the DRD locator request being provided for said public communication network resources to find at least one publically accessible DRD located near the WD, the locator request further including WD geographic location information;
- receiving DRD location information and rendering capabilities at the WD for the at least one publicly accessible DRD located near the WD, wherein DRD location information is based on said WD geographic location information;
- selecting a DRD with the WD for rendering said data;
- providing directions to the WD to physically locate the DRD selected by the WD, said directions provided to the WD from at least one of the WD and the network resource based on the WD geographic location information;
- physically locating the DRD at the DRD's publicly accessible location; and
- requesting at the WD that the data be transferred to the DRD through at least one of said public wireless cellular communications network and a short range wireless communications link with the DRD.

16. The method of claim 15 wherein said data is transferred to said DRD from said public wireless communications network resources following the request at said WD.

17. The method of claim 16 wherein said public wireless communications network resources facilitates transfer of said data to said DRD from a memory associated with said WD.

18. The method of claim 17 wherein said step of requesting that said data be transferred to said DRD is followed by a step that includes entering a passcode by the WD user at said DRD to render the data.

19. The method of claim 16 wherein said data is retrieved from a mailbox assigned to said WD only after a passcode is provided to said DRD by said WD user.

20. The method of claim 19 wherein said passcode is provided to said DRD by said WD.

21. The method of claim 19 wherein said passcode is provided at a user interface associated with said DRD.

22. The method of claim 15 wherein said DRD renders data after a render command is provided to said DRD by said WD user.

23. The method of claim 22 wherein said render command includes a passcode.

30. A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:

using a wireless device (WD) to request support through a wireless cellular telecommunications network to a remote server adapted to maintain location and capability information for data rendering devices, to locate at least one publicly accessible data rendering device (DRD) and provide publicly accessible DRD capability information stored in the remote server, and wherein the at least one DRD is not previously assigned to the WD and its location not previously known to the WD or its user, and the at least one DRD is physically accessible to all WD users, wherein locating of at least one DRD is facilitated by said remote server in cooperation with the wireless cellular telecommunications network in accordance with at least one of a WD user profile and the geographic location of the WD;

receiving DRD location and capability information at the WD for the at least one DRD located near the WD;

selecting a DRD with said WD for rendering data;

the network resource verifying operational readiness of the DRD selected by the WD and providing directions on the WD for the user to follow to physically locate the DRD selected with the WD if the DRD selected by the user is deemed operational, the directions provided to the WD based on the geographic location of the WD;

selecting data with the WD for rendering at the DRD once the DRD has been physically located by the user; and

providing the data from at least one of a memory and email box associated with the WD, at the request of the WD, to the DRD for rendering.

31. (Previously amended) The invention of claim 30, wherein said DRD renders said data after a render command is provided at said DRD by the user associated with said WD.

88. The method of claim 31 wherein said rendering command includes decryption coding.

89. The method of claim 30 further comprising the steps of:

receiving at a network server a request associated with said WD for delivery of said data for rendering at said DRD;

determining if delivery of said data can be approved by at least one of said network and/or said DRD; and

if delivery is approved, said server processes the request including facilitating delivery of said data to said DRD.

90. The method of claim 89 further comprising the step of receiving said data from said server at said DRD.

91. The method of claim 90 wherein said data is received at said DRD via a data network supporting said DRD.

92. The method of claim 90 further comprising the step of rendering said data at said DRD following a rendering command received at said DRD by said WD.

93. The method of claim 92 wherein said rendering command includes a passcode.

94. The method of claim 92 wherein said rendering command includes decryption coding.

97. The method of claim 1 wherein said rendering command includes decryption coding.

98. The method of claim 1 wherein said commands enable WD user manipulation of said data during rendering of said data at said DRD using said WD.

99. The method of claim 98 wherein said DRD is at least one of: a presentation projector, a video display, and a photocopier.

100. A method using a wireless cellular telecommunications network adapted for supporting wireless hand held device users in voice and data communications and with brokering data between handheld wireless devices and publicly accessible data rendering devices where physical locations for publicly accessible data rendering devices are not previously known to the wireless hand held device users, steps of the method carried out by a hand held wireless device user comprising:

providing a request over the wireless cellular telecommunication network from a handheld wireless device (WD) to a remote data network

resource to locate at least one publicly accessible data rendering device (DRD) and identify operational readiness and rendering capabilities for the at least one publically accessible DRD matching user requested rendering capabilities also provided from the WD, said remote data network resource adapted to provide assistance to WD users to locate and assess publicly accessible DRDs by determining WD geographic location, locating at least one operational DRD located near the WD based on the WD geographic location and DRD rendering capabilities, and then identifying on the WD at least one DRD that is operational, matches user requested rendering capabilities and is geographically located near the WD;

receiving location information for at least one publicly accessible DRD at the WD from the network resource through the wireless cellular telecommunications network supporting wireless communication by the WD, said location information identifying at least one DRD geographically located near the WD that is operational and matches user rendering capabilities;

selecting only one DRD from the at least one publicly accessible DRD using the WD;

obtaining directions to the only one DRD using at least one of the WD, the wireless cellular telecommunications network, and GPS based on the geographic location of the WD;

selecting data for rendering at the DRD using the WD after the only one DRD is physically located; and

transferring data using the WD to the DRD for rendering.

105. The method of claim 100 wherein said commands enable the WD user to manipulate said data during its rendering at said DRD using said WD.

106. A location based service method using data communications network resources to assist a user of a GPS-enabled hand held wireless device supported by a wireless cellular telecommunications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, the publicly accessible DRD comprising at least

one of a printer, video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:

receiving a user request provided over the wireless cellular telecommunications network from a user of the GPS-enabled hand held wireless device to a data communications network resource for assistance in locating a publicly accessible DRD based on geographic location information for the GPS-enabled wireless hand held device, rendering capabilities required by the user, and operational readiness of publicly accessible DRDs;

the data communications network resource determining the geographic location of the GPS-enabled hand held wireless device;

the data communications network resource using the geographic location of the GPS-enabled hand held wireless device to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device that is operational and matches the rendering capabilities required by the user;

the data communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device;

the user selecting only one publicly accessible DRD for rendering data; and

the GPS-enabled hand held wireless device with the support of at least one of GPS and the wireless cellular telecommunications network providing the user directions to physically locate the only one publicly accessible DRD given the geographic location of the GPS-enabled hand held wireless device.

107. The method of claim 106 further comprising the steps of:

receiving a request at a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data to the at least one publicly accessible DRD identified by the network resource; and

said network server transferring said data to said at least one publicly accessible DRD in response to the request.

108. The method of claim 107 further comprising the step of said at least one publicly accessible printer receiving said data from said network server.

109. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of the wireless hand held device directly onto a user interface associated with the at least one publicly available DRD.

110. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from the wireless hand held device.

111. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a wireless authorization signal provided locally from the wireless hand held device.

112. The method of claim 106 further comprising the steps of:
a user of said GPS-enabled hand held wireless device physically locating said publicly accessible DRD;

the user of said GPS-enabled hand held wireless device transmitting a request to a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data said publicly accessible; and

said network server transferring said data to said publicly accessible DRD in response to the request.

113. The method of claim 112 further comprising the step of said publicly accessible DRD receiving said data from said network server.

114. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of said wireless hand held device directly onto a user interface associated with said publicly accessible DRD.

115. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from said wireless hand held device.

116. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from said network server after further receiving a wireless authorization signal provided locally from said wireless hand held device.

117. The method of claim 106 further comprising the steps of:
a user of a hand held wireless device physically locating a publicly accessible DRD;
the user of said hand held wireless device wirelessly transmitting data from said hand held wireless device to said publicly accessible DRD
said publicly accessible DRD receiving said data from said hand held wireless device; and
said publicly accessible DRD rendering said data.

X. EVIDENCE APPENDIX

NONE

XI. RELATED PROCEEDINGS APPENDIX

NONE